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Environmental Impact Report

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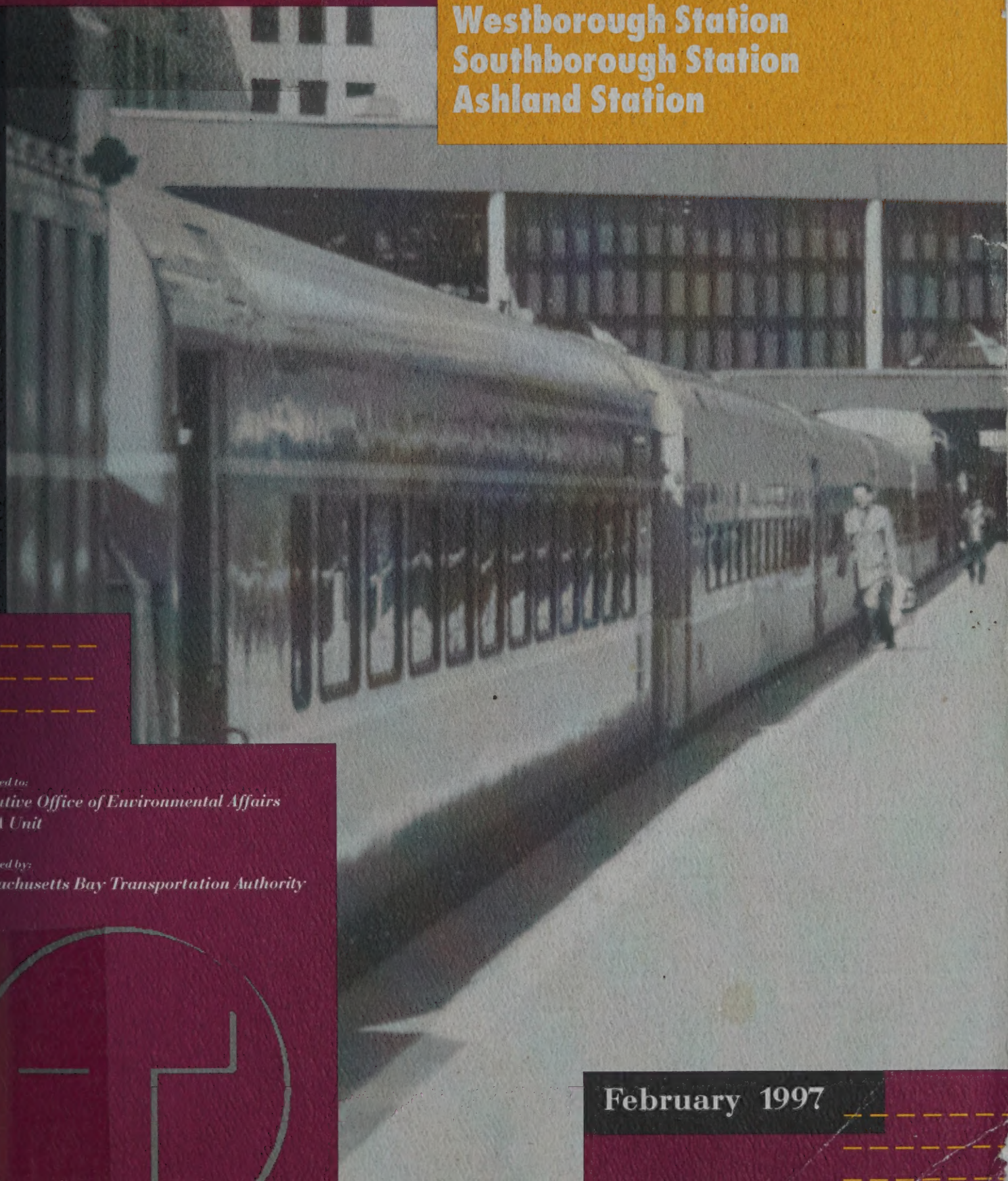

Submitted to:
Executive Office of Environmental Affairs
MEPA Unit

Submitted by:
Massachusetts Bay Transportation Authority

February 1997

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Worcester Commuter Rail Extension Project

FINAL ENVIRONMENTAL IMPACT REPORT

WESTBOROUGH STATION
-
SOUTHBOROUGH STATION
-
ASHLAND STATION

EOEA No. 9154

Commonwealth of Massachusetts

William F. Weld
Governor

Argeo Paul Cellucci
Lieutenant Governor

James J. Kerasiotes
Secretary and MBTA Chairman

Patrick J. Moynihan
MBTA General Manager

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EXECUTIVE SUMMARY

Introduction

The Massachusetts Bay Transportation Authority (MBTA) proposes to restore the Worcester-Boston commuter rail service discontinued in 1975 ("the Worcester Extension project" or "the project"). In August, 1992, the MBTA submitted to the Secretary of Environmental Affairs ("the Secretary"), under various provisions of the regulations for the Massachusetts Environmental Policy Act (MEPA) which she administers, an Environmental Notification Form (ENF) on the Worcester Extension project. A project's ENF is the basis on which the Secretary determines whether it requires further environmental review. In October, 1992, the Secretary determined that the project required an Environmental Impact Report (EIR), a full study of the project's impacts and of mitigation that these impacts may require. That same month the MBTA agreed that the project would be reviewed under MEPA as a Major and Complicated project, with a Special Procedure for the MEPA review. The Special Procedure contemplated a comprehensive Draft EIR (DEIR) on the whole project, at about a 30% design stage, and then either a single Final EIR (FEIR) on the project, or FEIRs on various project elements, all FEIRs to be at the 60% design stage. The Special Procedure established a Citizens Advisory Committee (CAC) to assist the Secretary with the project's MEPA review.

The project's initial DEIR was withdrawn in November, 1993, but a concurrent Notice of Project Change, proposing Interim Service of three trains inbound with the morning commute and outbound with the evening commute, express between Worcester and Framingham, was approved. The project's revised DEIR was approved on March 16, 1995. Thereafter, the MBTA, in accordance with the provision of the Special Procedure, submitted a Notice of Project Change to develop two sequential FEIRs on the Project, the first to review the impacts associated with the Railroad Right-of-Way (track and signal work) and Layover Facility, the second to review Commuter Rail Stations and Railroad Operations. The Secretary concurred with this approach in the Certificate on the Notice of Project Change dated June 22, 1995.

Due to the unresolved issues pertaining to the proposed Westborough, Southborough, and Ashland Stations, the MBTA filed a subsequent Notice of Project Change on October 31, 1995 on the project requesting that the planned second Final EIR for stations and railroad operations be split into two sequential FEIRs–one Final EIR for the Millbury and Grafton Stations and Railroad Operations, and a subsequent Final EIR for Westborough, Southborough, and Ashland Stations. The Secretary approved this request by a Certificate dated January 10, 1996. A separate certificate on the same date, in response to a Notice of Project Change filed for the Framingham Terminal Development (EOEA No. 10106), and published in the *Environmental Monitor* on December 8, 1995, transferred MEPA review of the traffic and parking elements of that project to review in the Worcester Commuter Rail Extension environmental process.

The Final EIR for the Railroad Right-of-Way and Layover Facility, published and distributed in July 1995, was found to be adequate in a Certificate issued on September 14, 1995 by the Secretary of Environmental Affairs. The Final EIR for the Millbury Station, Grafton Station and Railroad Operations, published and distributed in March 1996, was found to be adequate in a Certificate issued on June 14, 1996 by the Secretary.

This Final EIR, chiefly concerning the Westborough, Southborough, and Ashland Stations proposed for the Worcester Extension project will, if approved by the Secretary, conclude the project's MEPA review.

What follows is an Executive Summary of this Final EIR.

Project Background

The project supports two interrelated public policy goals, reducing traffic congestion on the Massachusetts Turnpike (I-90) and in downtown Boston and improving air quality for the Boston metropolitan region.

Traffic congestion has been a complicated public policy problem for the Boston metropolitan area for decades, as it has been for most American cities. The same causes underlie this problem for all older cities like Boston: increasing automobile use per capita; residential suburbanization; and the continued viability of the downtown business core as a preferred employment location for the myriad of specialized services needed by the entire metropolitan area. The same solution to the traffic problem has been tried in these cities: expanded center-suburb highway capacity. Locally, this solution is reflected in the 1948 Master Highway Plan for the

Boston Metropolitan Area, which became, for the next 20 years, the work plan on the basis of which much of the center-suburb roadway capacity now in place in metropolitan Boston was put in place. By the late 1960's, however, the limits of this solution were becoming clear. Citizen activists and progressive transportation experts increasingly opposed the landtakings and neighborhood disruption new center-suburb highway capacity would entail, particularly since the demand for that new capacity appeared, from the perspective of the times, insatiable.

On the basis of the technical conclusions of the Boston Transportation Planning Review in the early 1970's and the continued political pressure from activists opposing highways, Governor Francis Sargent began the forging of new transportation priorities for metropolitan Boston based on improved public transportation. The planning, construction and operation of this revitalized system has been the job of the metropolitan Boston area's public transportation manager, the MBTA. Federal initiatives have complemented the state's initiatives, most recently the Intermodal Surface Transportation Efficiency Act (ISTEA) enacted in 1991. A relatively brief surge in Federal transit assistance was enjoyed by the States in the 1970's as well. Since the early 1970's, several important new MBTA projects have been placed in operation to serve downtown Boston, from within the city and from its inner suburbs inside Route 128, and from the outer suburbs beyond Route 128 as well. All the new service for downtown Boston from the outer suburbs involved revitalizing existing commuter rail lines and, later, extending these lines out to the expanding edge of the Boston employment market. The Worcester Extension project is part of this program, which also includes, among others, service extensions to Newburyport on the North Shore and to several locations on the South Shore using restored Old Colony corridors. With the completion of the Worcester, Newburyport, and South Shore commuter rail projects, the MBTA's extension program will be largely completed. Figure ES-1 shows all the MBTA's existing and planned commuter rail lines, including the Worcester Extension project.

While center-suburb traffic management was one driving force behind the vast program of MBTA public transportation improvements now nearing completion, air quality in the Boston metropolitan area also is an important concern. This is particularly so since the passage of the 1990 amendments to the Clean Air Act. The 1990 Clean Air Act amendments place all the states whose air did not meet federal standards in 1990 on strict timelines, longer for states with more serious problems, for meeting and thereafter maintaining those standards. The longest timelines are for compliance with the federal ozone standard. By 2007 California, the only state with what the 1990 amendments classified as "extreme" ozone air quality problems, must comply. Massachusetts, whose ozone problems are classified as "serious," must

comply by 1999, by reducing the ozone precursors volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) by about 25% from 1990 levels of in-state generation. The penalties for non-compliance include possible loss of federal highway funds and reclassification into the next highest category of Clean Air Act air quality, "severe." Reclassification under the 1990 amendments would impose additional air quality control burdens that could seriously constrain economic development in Massachusetts.

Massachusetts's air has been getting cleaner for the past 15 years. But as the traditional target of clean air strategists, "stationary sources" of air pollution like industrial smokestacks or electric power plants, have either reduced emissions because of improved control technologies or gone away because of economic changes, increased attention has been given to "mobile sources", chiefly automobiles, as a major source of air contaminants. For even as individual new automobiles, because of the pressures of more stringent federal standards, operate with fewer and less toxic emissions, there are more cars on the road then ever before, and the average annual mileage driven per car is rising. In metropolitan Boston, several factors are behind this expanded automobile use. These include continued residential suburbanization, to the areas between Route 128 and I-495 and now even beyond; a newer phenomenon of increasing employment growth outside downtown Boston at major highway intersections and interchanges; and, perhaps undergirding these both, dramatic new wealth: between 1970 and 1990 Massachusetts, per capita, went from being among the poorer to among the richest of the U.S. industrial states. Together, these factors threaten the ability of Massachusetts to achieve federal ozone standard by 1999 and to maintain it thereafter. Massachusetts now meets all the other federal air quality standards.

Every state under a Clean Air Act timeline must have a plan, called a State Implementation Plan or SIP, for timely meeting the federal standards. The plan represents that state's allocation of the relative burdens of further improvements in air quality. Because so much progress has already been made in Massachusetts in making stationary sources cleaner, much of the remaining burden of meeting the 1999 deadline will fall on mobile sources. And while mandatory federal auto emission standards, along with the Commonwealth's decision to impose even tougher voluntary federal auto emission standards, will mean increasingly cleaner cars on the state's roadways, only by limiting the growth in overall auto travel can Massachusetts ensure it will meet the 1999 ozone compliance deadline. A clear means to this reduction is an efficient public transportation system. And so the Massachusetts SIP contains extensive commitments to keep operating virtually all existing MBTA services and to start operating several additional MBTA services in Boston itself and

throughout the metropolitan area. Among the planned services included in the SIP are the unfinished commuter rail projects just discussed, including the Worcester Extension project, which is to be operational by December 31, 1996 unless infeasible due to adverse engineering, environmental or economic impact. DEP has deemed the project already operational for SIP purposes, by virtue of Interim Service starting on September 26, 1994, but has strongly urged the MBTA to have Basic Service fully underway in 1997.

Thus, the MBTA's rebuilding of metropolitan Boston's public transportation system, which began in the 1970's as an alternative to roadbuilding for combatting traffic congestion, is nearing completion in the 1990's with another central goal to serve: helping Massachusetts to meet the federal ozone standard by 1999, and to maintain it thereafter. The Worcester Extension project will serve both goals.

Project Need

The Worcester Extension project will play an important part in the Commonwealth's overall strategy for reducing traffic congestion in downtown Boston and improving air quality for the Boston metropolitan region by providing a reliable public transportation alternative for the rapidly growing number of commuters to Boston from communities west of Boston near and beyond I-495 whose numbers will increasingly test the capacity of existing radial highways carrying commuters to and from Boston, especially the Massachusetts Turnpike.

Local rail service between Worcester and Boston ran continuously between 1835 and 1975, and freight and intercity passenger service runs to this day. Particularly after World War II, increasingly widespread automobile use led to increasing suburbanization, and to an extensive highway building program in the Boston metropolitan area, as throughout the Nation. The chief elements of Boston's existing rim-and-spoke highway system began with the construction of Massachusetts Route 128 (now also, in large part, I-95) in the mid-1950's and were in place by the mid-1960's with the completion of the Massachusetts Turnpike Extension from Weston to Boston. Increasingly easy automobile travel to downtown Boston, eased in part by an increasing shift of overall employment to locations outside Boston, led to widespread declines, throughout Boston as throughout most of the Nation's metropolitan areas, in commuter rail usage, and to declines as well of existing railbeds, stations, rolling stock, and equipment.

Nonetheless, the continued movement of population out of Boston proper has not been matched by a decline in employment in the downtown Boston area. Instead,

employment in downtown Boston has continued to grow strongly, and is expected to continue to grow steadily in the coming decades. It is the interaction between these two phenomena–continued residential suburbanization and continued strong job growth in downtown Boston–that is the driving force behind the Worcester Extension project and MBTA extension projects to Newburyport and the South Shore. The demographics which, by 1975, had led to low patronage for Worcester/Boston commuter rail service, have changed dramatically less than twenty years later.

The MBTA estimates that patrons for the Worcester Extension service will be drawn from towns whose centroids are approximately 6 miles or fewer from the rail line, and from not much beyond 10 miles from the rail line. This comprises 28 communities, illustrated on Figure ES-2, which the MBTA projects will form the core service area for the Worcester Extension project. In these 28 communities, population increased only 8 per cent between 1980 and 1990, but the work force has grown 23 per cent, and work trips to Boston proper and to Cambridge have increased, respectively, 72 per cent and 151 per cent. Large real increases between 1980 and 1990 are involved, moreover. Altogether, the 28 service area communities generated just over 6,000 work trips to the Boston area in 1980, and some 11,000 work trips in 1990. The Worcester Extension project aims to capture approximately 2,100 riders in 1996, 2,300 riders in 2001, 2,500 riders in 2006, and 2,700 riders in 2011.

Project Elements

The Worcester Extension project DEIR originally proposed comprises four key physical elements: corridor upgrading; up to five intermediate stations; a layover facility for staging morning inbound trains; and an interim Worcester station. A fifth physical element, the traffic and parking elements of the Framingham terminal development project (EOEA No. 10106), added to the project in 1996.

Operations may be expanded if sufficient demand materializes.

Corridor Upgrading

Existing commuter service between Boston and Framingham operates on tracks owned by the MBTA. (Conrail also uses these tracks.) The new Worcester service will operate on the Conrail mainline between Framingham and Worcester. Significant improvements on this mainline will be needed to accommodate both existing Conrail freight and Amtrak intercity service and the new Worcester service. About four miles of eastbound track in Worcester will need upgrading. Currently,

this section of track is used as siding/storage track by Conrail. Recently, the need to replace this storage capacity was identified by Conrail. This storage capacity will be replaced by the construction of 1.4 miles of new siding along the main line immediately west of Union Station in Worcester. Double tracks will be restored over about seven miles through Millbury, Grafton, and Westborough; the roadbed is generally in adequate condition to allow this restoration. Additional track and signal work will be undertaken throughout the corridor to accommodate additional trains. Construction on the track improvements commenced in the Fall of 1995 and have been completed.

Intermediate Stations

MBTA ridership estimates were presented in the second FEIR for several scenarios, but the MBTA has consistently preferred five intermediate stations. However, the proposed Millbury Station, off either Route 122 opposite Exit 11 of the Massachusetts Turnpike or off Route 20 in Worcester, will not be proceeded with at this time; all its expected ridership will be diverted either to Worcester or Grafton. Four intermediate stations will be proceeded with, in Grafton, off Pine Street near Route 30; in Westborough, off Smith Valve Parkway; in Southborough, at Route 85 and Southville Road; and in Ashland, off Pleasant Street and High Street (north of the tracks) and off Route 135 (south of the tracks).

The Grafton Station was reviewed in the second FEIR. The proposed Westborough, Southborough, and Ashland stations are reviewed in this third FEIR.

The proposed Westborough Station, on a 13-acre site along the southerly side of Smith Valve Parkway, will have 300 paved parking spaces, two 800-foot-long platforms, a drop-off area, a pedestrian overpass, lighting, and landscaping. The 800-foot-long platforms will be accessible to the handicapped by 45-foot-long access platforms; the parking lot will include reserved spaces for the handicapped adjacent to the platform. Station amenities include canopies, wind break screening along the access platform and at intervals along the low level platform, benches, bicycle racks, sites for telephones and newspaper vending machines, and train warning systems. Intertrack fencing will be installed for the length of the station to discourage pedestrians from crossing the tracks. As a safety measure a protective barrier will be installed along the south side behind the station platform where it abuts residential properties. The barrier will consist of an earthen berm, fencing and/or landscaping. The access platform (mini-high) is shown on Figure 2.1-4; the pedestrian overpass is shown on Figures 2.1-5 and 2.1-6. No significant environmental impacts will result from the construction operation of the Westborough Station and so no mitigation is required. The MBTA will erect signs discouraging traffic to the new station from

using Fisher Street along a nearby school and will construct sidewalks beyond the proposed station along Smith Valve Parkway, Otis Street, and Fisher Street. The sidewalks will cost approximately $126,000 exclusive of right-of-way costs.

The proposed Southborough Station is located just west of the Route 85 intersection with the mainline railroad (Figure 2.0-1, Panel 7 of 9 on page 2-8). Parking at this station will be provided north and south of the tracks, as shown on the site plan (Figure 2.1-2). The north side of the proposed station will consist of 90 paved parking spaces, an 800-foot-long platform, including a 45-foot-long handicapped access platform, a drop-off area, lighting, and landscaping. The general store will remain in its current location on the easterly portion of the site.

The proposed south side of the commuter rail station will consist of 330 paved parking spaces, an 800-foot-long platform, including a 45-foot-long handicapped access platform, a drop-off area, lighting, landscaping, a 400-foot-long access drive to Route 85, and all other station amenities cited previously under the Westborough Station. Intertrack fencing will be installed for the length of the station to discourage pedestrians from crossing the tracks. The station will be accessible for the handicapped. However, instead of the standard pedestrian overpass, there will be a pedestrian underpass at the Route 85 railroad bridge over River Street. As part of the bridge reconstruction, the span will be increased to allow for a wide sidewalk under the west end of the bridge with stairs and ramps connecting to the station platforms. Work associated with design and construction of the bridge will be coordinated with the Massachusetts Highway Department, Conrail, and the Southborough Department of Public Works.

Southborough Station will require traffic mitigation. The section of Cordaville Road (Southborough) between River Street and Southville Road will be closed except to local traffic; through traffic will be directed through a reconstructed signalized intersection at River Street and Southville Road with added exclusive left-turn lanes on each approach, improved turning radii, and appropriate new pavement marking and signage. necessary grading, drainage and landscaping will be provided. Also, the MBTA will monitor the Route 30/Route 85 intersection after Southborough Station opens and, once traffic has stabilized, adjust the signal timing, if necessary, to improve operations. Traffic mitigation will cost abut $500,000, exclusive of right-of-way costs. Finally, the MBTA will construct about 9,500 feet of new sidewalks as an amenity, at an estimated cost of $145,000. See proposed mitigation and amenities at Figure 6.12-1.

The layout, grading, and landscape design of the south side part of the site will allow public access and recreational activities. Some of the adjacent land is owned by the

Sudbury Valley Trustees, with whom the design work related to recreation and access will be reviewed and coordinated.

The Ashland Station - West Alternative connected with the East Alternative has been adopted as the proposed Ashland Station site because of likely business displacements, inconvenient platform layouts, and possible Nyanza site complications. It is still proposed that 200 parking spaces be provided in the north lot (164± plus a minimum of 36 commuter spaces daily in the adjoining restaurant parking lot) and 500 spaces in the south lot. The north lot access will now be on Pleasant Street (formerly proposed on High Street); the south lot access will be from the previously proposed location on Route 135 (Union Street) via a 4,000-foot access drive. The easterly end of the north lot displaces a one-story, wood-frame office building. The site configuration of the south lot has been revised to be more sensitive to the bordering vegetated wetlands. The station will include the 700 parking spaces noted above, two 800-foot-long platforms, including 45-foot-long handicapped access platforms, drop off areas, a pedestrian overpass, lighting, landscaping and all other station amenities cited previously under the Westborough Station. Intertrack fencing will be installed for the length of the station to discourage pedestrians from crossing the tracks. Ashland Station will require traffic mitigation. This will include retiming the Union Street/Summer Street signal, replacing the Main Street/Union Street signal equipment with demand-based timing providing for exclusive and protected left-turn movements, and constructing a signalized driveway/Union Street intersection wit a widening Union Street to allow an exclusive left turn on Union Street eastbound. The new Main Street/Union Street signal equipment will cost about $150,000, the new driveway equipment, widening, pavement marking and signage about $300,000. Ashland Station will also require, if a wetlands variance is secured from DEP, fully offsetting replication for wetlands taken, which maybe as much as 38,000 square feet. The MBTA has raised with the Secretary whether lesser wetlands impacts, which would result from the Town of Ashland's preferred number of southern parking spaces, are overbalanced by other environmental and construction costs. Also, as an amenity, the MBTA will construct about 7,200 feet of sidewalk, costing about $96,000 exclusive of any right-of-way required, on Cordaville Road, Pleasant Street, and High Street.

Layover Facility

The proposed layover facility adjacent is an existing rail yard in Worcester with primarily non-sensitive land uses. It is proposed on the outer terminus of the Worcester line, near where outbound trains will end each day's service and will be needed to begin each day's inbound service. (Trains originating in Boston would provide outbound morning service to Worcester.) The proposed layover facility can

accommodate four train sets with necessary support facilities. Wayside power will be provided to limit the amount of locomotive idling required, particularly during cold weather. The impacts of the layover facility were addressed in the first FEIR. Construction started in Fall, 1995 and is now substantially complete and in operation.

Worcester Station

The existing Amtrak station in downtown Worcester, north of the railroad tracks, has been modified and expanded so as also to serve as an interim station. Eventually, Worcester passengers will use a redeveloped Union Station, about 700 feet west of the Amtrak station. The redevelopment of Union Station, jointly by the Worcester Regional Transit Authority and the Worcester Redevelopment Authority, is undergoing separate MEPA review under EOEA #9521. Union Station's opening is planned for early 1998.

Framingham Terminal Development

The traffic and parking elements of the Framingham Terminal Development project include approximately 95 additional parking spaces on the south side of Waverly Street west of the Waverly Street/Concord Street (Route 135/Route 126) intersection and reconstruction and signalization of the intersection itself.

Service

The MBTA began interim Worcester Extension service, express between Worcester and Framingham, on September 26, 1994. Service was weekdays only, three trains inbound during the morning commute, three trains outbound during the evening commute. Service was increased in December, 1996 to provide four rush hour and one midday inbound trains and four rush hour and one midday outbound trains. Planned Basic Service will begin with the opening of Grafton Station with ten inbound and ten outbound trains each workday.

Project Alternatives

Overall Alternatives

In addition to No Build, which forms the standard environmental baseline against which a project's impacts are assessed, the MBTA, in its DEIR, considered the public transit alternative of express bus service designed to be roughly equivalent to the project's service for its projected ridership. The key comparisons were around air quality impacts and costs, capital and operating. The second FEIR addressed the

economic impact of the Worcester Extension Project and demonstrated the Project's financial feasibility for the overall MEPA review.

This third FEIR chooses the so-called Ashland-West Alternative as the MBTA's preferred alternative for the project's Ashland Station.

Project Socio-Economic Impacts

In its DEIR, the MBTA reviewed several concerns expressed by observers about the Worcester Extension project's possible socio-economic impacts. Among these were land use impacts in the service area, impacts on local revenues and local property values in communities with stations, and changes in existing MBTA assessments or their possible imposition on service area communities not now in the MBTA district. In general, the Worcester Extension project is not expected to have a significant impact on any of these areas of concern. Indeed, a recent study suggests that overall property values should increase, beyond normal appreciation, in communities with new commuter rail stations.

Project Environmental Impacts

In its DEIR, the MBTA comprehensively analyzed all the project elements in the following impact areas: traffic; air quality; noise and vibration; site drainage; wetlands and wildlife; historic sites; archeological resources; visual impacts; hazardous materials; pedestrian safety; and construction. In this FEIR, the primary focus is on the impact of building and operating Westborough, Southborough, and Ashland stations.

Project Mitigation

MEPA requires that the impacts from projects, whether public or private, be identified, minimized, and mitigated where feasible and where the project is the cause of unacceptable impacts. Not all impacts from a project require mitigation. The MBTA understands there are various local proposals for mitigation, but emphasizes that, since the Worcester Extension project is itself a required air quality mitigation measure under the Massachusetts SIP, its mitigation should be as focussed as possible on setting off impacts clearly traceable to the project. The MBTA continues to evaluate mitigation associated with the operations of the Worcester

Extension Project as well as the construction and use of the proposed intermediate stations.

This third FEIR analysis of potential impacts of building and operating the Westborough, Southborough, and Ashland stations addresses traffic, air quality, noise and vibration, wetlands and drainage, historic and archaeological resources, visual, hazardous materials, pedestrian safety and short-term construction impacts.

FEIR CIRCULATION LIST

Federal

Department of the Army
  Corps of Engineers, New England Division
Department of the Interior
  Fish and Wildlife Service, N.E. Region
Environmental Protection Agency
  Region 1, Environmental Review Office

State

Executive Office of Communities and Development
  State Clearinghouse
Executive Office of Consumer Affairs
  Department of Public Utilities
Executive Office of Environmental Affairs
  Department of Environmental Management
    Division of Resource Conservation (Inland ACEC Program)
  Department of Environmental Protection, Boston Office
    Division of Waste Site Cleanup
    Division of Watershed Protection
  Department of Environmental Protection, Central Regional Office
    Division of Wetlands and Waterways
  Department of Environmental Protection, Northeast Regional Office
    Division of Wetlands and Waterways
    Division of Water Pollution Control
  Department of Fisheries and Wildlife and Env. Law Enforcement
    Division of Fisheries and Wildlife
    Massachusetts Natural Heritage Program
  Department of Food and Agriculture, Lancaster Regional Office
    Bureau of Land Use
Executive Office for Administration and Finance
    Division of Capital Planning and Operations
Executive Office of Transportation and Construction

State (cont.)

Massachusetts Highway Department, Boston Office
Massachusetts Highway Department, District #3
Massachusetts Historical Commission
Massachusetts Architectural Access Board
Massachusetts Water Resources Authority
State Transportation Library

Elected Officials

U.S. Congressman James McGovern
State Senator Matthew J. Amorello
State Senator Arthur E. Chase
State Senator Robert A. Durand
State Senator David P. Magnani
State Senator Robert D. Wetmore
State Representative John J. Binienda
State Representative Stephen M. Brewer
State Representative Harriette L. Chandler
State Representative William Constantino, Jr.
State Representative Barbara Gardner
State Representative William J. Glodis, Jr.
State Representative Emile J. Goguen
State Representative Barbara Gray
State Representative Paul Kollios
State Representative William J. McManus, II
State Representative Kevin O'Sullivan
State Representative Vincent A. Pedone
State Representative George N. Peterson
State Representative John A. Stefanini

Regional Agencies

Central Massachusetts Regional Planning Commission
Metropolitan Area Planning Council
Worcester Regional Transit Authority

City of Boston

Environment Department
Transportation Department
Redevelopment Authority
Public Library

City of Worcester

Mayor's Office
City Manager
City Council
Conservation Commission
Planning Board
Office of Planning and Community Development
Department of Traffic Engineering
Redevelopment Authority
Public Library

Town of Millbury

Board of Selectmen
Commuter Rail Study Committee
Conservation Commission
Planning Board
Public Library

Town of Grafton

Town Administrator
Board of Selectmen
Conservation Commission
Planning Board
Grafton Water District
Commuter Rail Study Committee
Public Library

Town of Westborough

Board of Selectmen
Commuter Rail Study Committee
Conservation Commission
Historical Commission
Planning Board
Recreation Department
Town Engineer
School Committee
Town Coordinator
Police Department
Public Library

Town of Southborough

Board of Selectmen
Commuter Rail Study Committee
Conservation Commission
Planning Board
Public Library

Town of Ashland

Board of Selectmen
Conservation Commission
Planning Board
Commuter Rail Study Committee
Town Manager
Town Planner
Public Library

Town of Framingham

Board of Selectmen
Conservation Commission
Planning Department
Public Library

Town of Hopkinton

Board of Selectmen
Conservation Commission
Planning Board
Public Library

Town of Wellesley

Board of Selectmen

City of Newton

Department of Planning and Development

Citizens Advisory Committee

Mr. David C. Robbins, Chairman
Mr. Ed Bates
Mr. Robert Gentile
Mr. Dex Malone
Ms. Kathleen Bartolini
Ms. Patricia Murphy-Capone
Mr. Wayne Thies
Mr. Stephen Doret
Ms. Judith McCabe
Mr. Michael O'Bryan
Mr. James R. Waterman
Ms. Lydia Bogar
Mr. John A. Reil
Mr. Edward J. Ropiak
Ms. Margaret A. Lavallee
Mr. Frederick Moseley
Senator Matthew J. Amorello
Mr. Jeffery Dore
Mr. Stephen Bishop
Ms. Mary MacAdam
Mr. David S. Goldman
Mr. Andrew Boyce
Mr. David Holbrook
Mr. Shaun Finnegan
Mr. Frank Healy
Mr. John Stasik
Mr. William J. Christensen
Mr. Mark W. Davis

Private Groups/Others

Massachusetts Audubon Society
Metrowest Growth Management Committee
Massachusetts Restaurant Association
Bicycle Coalition of Massachusetts
Preservation Worcester
Union Station Alliance
Worcester Area Chamber of Commerce
Worcester Business Development Corp.
Tufts University School of Veterinary Medicine
Worcester Telegram and Gazette
Conrail
Peter Pan Bus Lines, Inc.
Cavalier Coach Corporation

Private Groups/Others (cont.)

Gulbankian Bus Lines
MBTA Advisory Board
MASCO
Association for Public Transportation, Inc.
Joint Regional Transportation Committee
People for Ashland West Alternative
William and Helen Panas
Joseph Orlando
Louis and Maureen Jankauskas
Robert, Barbara, and Marie Brais
Lawrence Gomes
Cheryl and Paul Crivello
Dorothy McMahon
Elizabeth Colbert
Andrew & Teresa Boyce
Scott Rossiter
John Woodward
Andrew B. O'Donnell
Brennan F. Wall
Mary Fisher
Mary Cullen
Stephen & Charlene Henry
Brian & Antoinette Kennedy
Mario Avelloni
E. Thomas & Judith McCabe
Sally Tajiani
Janice & Allen Silvestry
Rosemary Johnson
Diane Power
Dennis Cox
Jacqueline & David Cox
Dorothea MacLeod
Marvin Silver
Barbara Reismann
Julia M. Jacobs
Jackie Adams
Keith Davison
Ellen Giargiari
Claudia Lefter (etal)
Claudia Lefter (for Holdens)
Nelson Holden
Daniel Giargiari (Burnam's Rest.)
Judith & Thomas Little
William & Mary Anne Coveney
Jane & Richard Dunphy
Joseph Harrington

Private Groups/Others (cont.)

Mrs. Paul Smith
William Murphy
Jennifer Speed
Bruce Johnson
Susan Stager
Ellen Gugel
Barbara Sullivan & Fran Lynch
Richard Fournier, Jr.
James Knowles
Peter Venuto
Patricia Pirozzi
James Waddell
Russell Fustino
Jane Fedorowicz & Michael Golibersuch
Anne Huff
Kevin M. Maloney
Ronald J. Etre
Scott & Stella Smith
Mary Ann Maizel
Ronald & Donna Fitman
Mr. & Mrs. Charles Kach
Sharon M. Yager
Emily Harper
Tony & Laurie Mattero
Stephen J. Stepien
Jack Murphy
Peter Rodrigues & Kathy Russo
Beverly & Paul Campbell
Enzo P. Simmarano
Jerald & Deborah Dilorio
Laurie A. Murphy
Victoria A. Pellegrino
Kevin Parker
Mr. & Mrs. Paul G. LaMontagne
Julia Buduo
Paul Foley
Edmond J. Kelly
Judith A. Bonofiglio
Carol Fenlon

SECTION 1.0 PROJECT OVERVIEW

Introduction

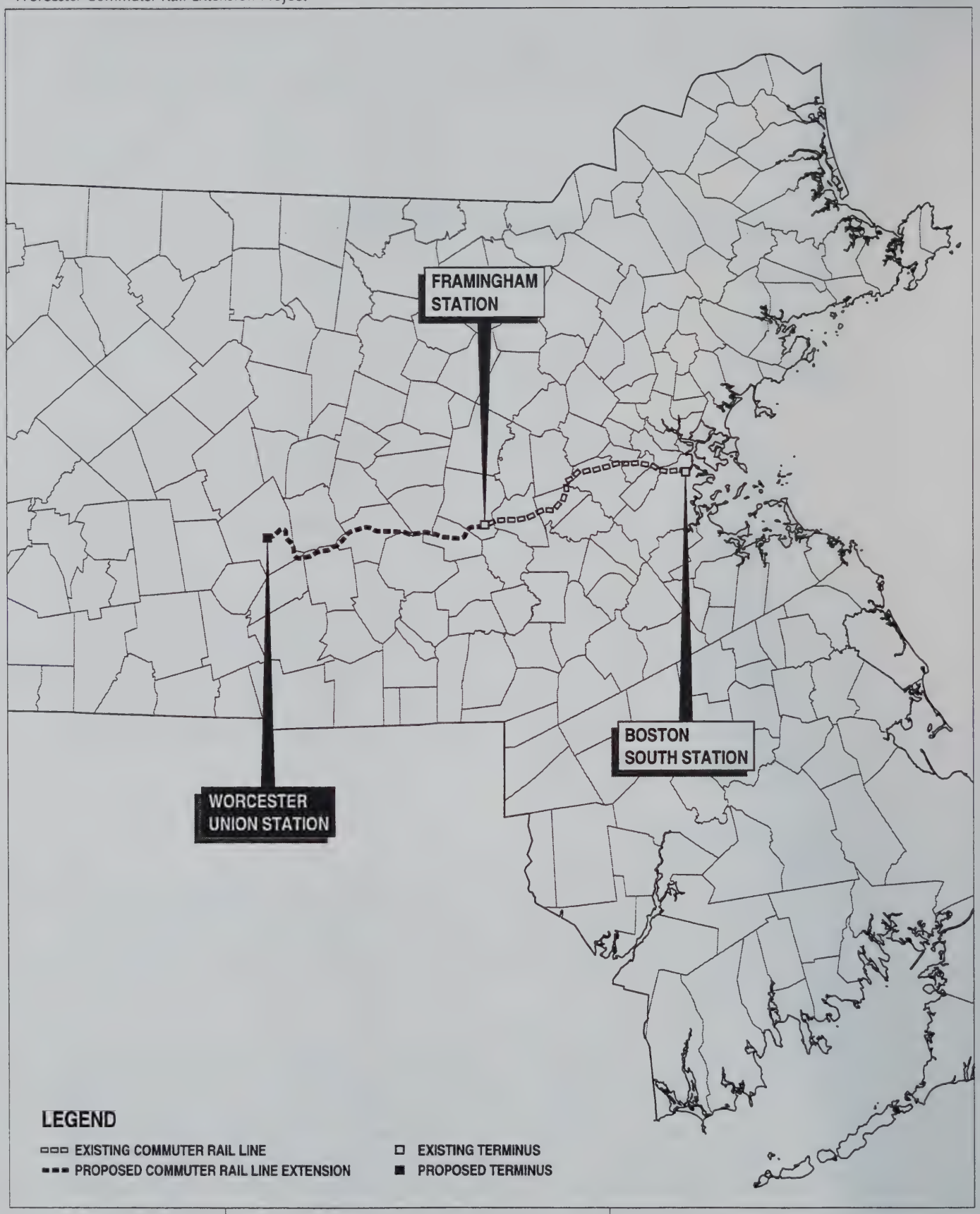
This Final EIR addresses the likely impacts associated with the construction and operation of local commuter rail stations in Westborough, Southborough, and Ashland. It is the third, and expected to be the last, Final EIR on the Worcester Commuter Rail Extension project. The evolution of this Final EIR into its current form is covered in the documents in Section 1.2 and Appendix A of this FEIR.

Supporting documents to this Final EIR include its Appendix material bound in, as well as the Draft EIR, with separate Appendix-Volume I and Appendix-Volume II, published and distributed in November 1994 and approved in March 1995; the Final EIR, Railroad Right-of-Way and Layover Facility published and distributed in July 1995 and approved in September 1995; and the Final EIR, Millbury Station, Grafton Station and Railroad Operations, with separate Appendix-Volume 1, published and distributed in March 1996 and approved in June 1996.

1.1 Proposed Project

This Final Environmental Impact Report addresses the proposed activation of Westborough, Southborough, and Ashland stops for MBTA Worcester Commuter Rail Extension Service now stopping at Worcester, Framingham, and points east of Framingham on what has heretofore been known as the Framingham line (see Figure 1.1-1).

The existing rail line between Framingham and Worcester is owned by Conrail. The proposed Worcester extension of commuter rail service will share operations on the line with existing Conrail freight and intercity passenger service by Amtrak. The project requires restoration of double track over the westerly 11 miles of the project between Westborough and Worcester, along with overall upgrading of track and signals to permit 60 mph speeds for trains. Trackage upgrades will consist of some seven miles of new



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 12 Miles

0 1750

LOCUS MAP

FIGURE 1.1-1

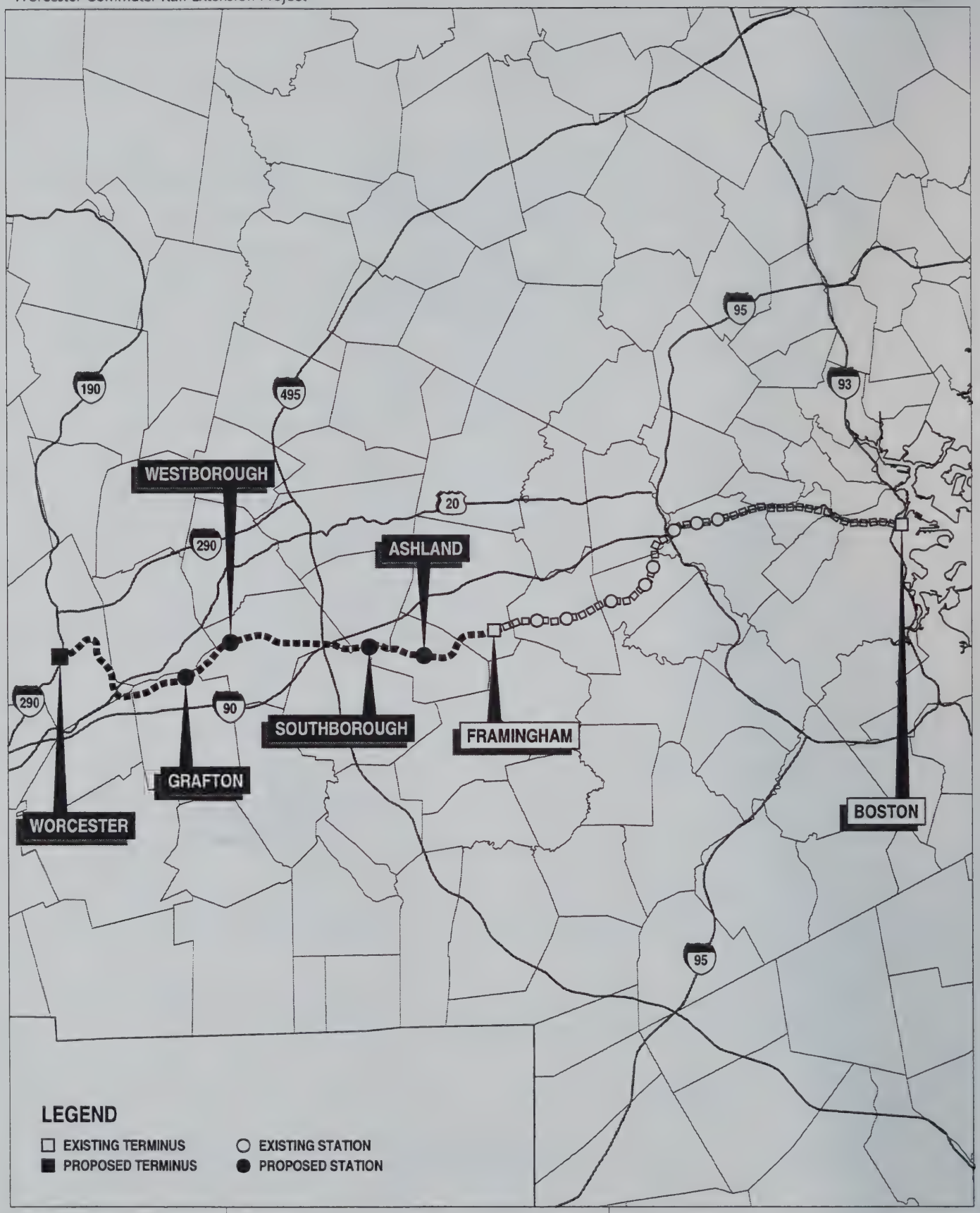
second track and four miles of upgraded second track. Conrail uses a section of the existing second track in Worcester for a storage track. To replace this capacity, a new 1.4 mile third track will be constructed along the mainline west of Union Station.

Worcester extension service was initiated on September 26, 1994 by operating "interim" service consisting of three peak hour trains inbound during the morning commute and outbound during the evening commute, running express between Worcester and Framingham. Union Station in Worcester, currently being designed for use as an intermodal transportation facility, is expected to be re-opened in early 1998 as the ultimate Worcester extension terminus. A temporary station facility was constructed at the present Amtrak station in Worcester for use until the Union Station opens.

The project proposes construction of intermediate commuter rail stations along the corridor in Grafton, Westborough, Southborough, and Ashland (see Figure 1.1-2). The previously proposed Millbury Station has been deferred under the current program, with the option of further studies and analyses which could lead to the construction and operation of a Millbury Station at a future date. The impacts of this deferral are presented in Section 2.0 of this FEIR. The subject of this Final EIR will be the Westborough, Southborough, and Ashland Stations, which are anticipated to be operational by the end of 1997.

In addition to the proposed intermediate stations, a regional station was investigated for a location in the vicinity of the rail line crossing of I-495 just north of the existing I-90/I-495 interchange. In consideration of the environmental concerns, high cost of constructing access, and long lead time for design and environmental permitting, a regional station is not proposed as part of this project. A Regional Station study, called for in the 1994 Transportation Bond Bill passed by the Massachusetts Legislature, was completed recently. A draft of the study was circulated to interested parties for comments in December 1995. The final report was published in January 1996. A brief summary of the Regional Station Feasibility Study results are presented in Section 2.4 of this FEIR.

Commuter rail ridership is expected to be drawn primarily from 28 communities in the Boston Metrowest and Greater Worcester area (see Figure 1.1-3).



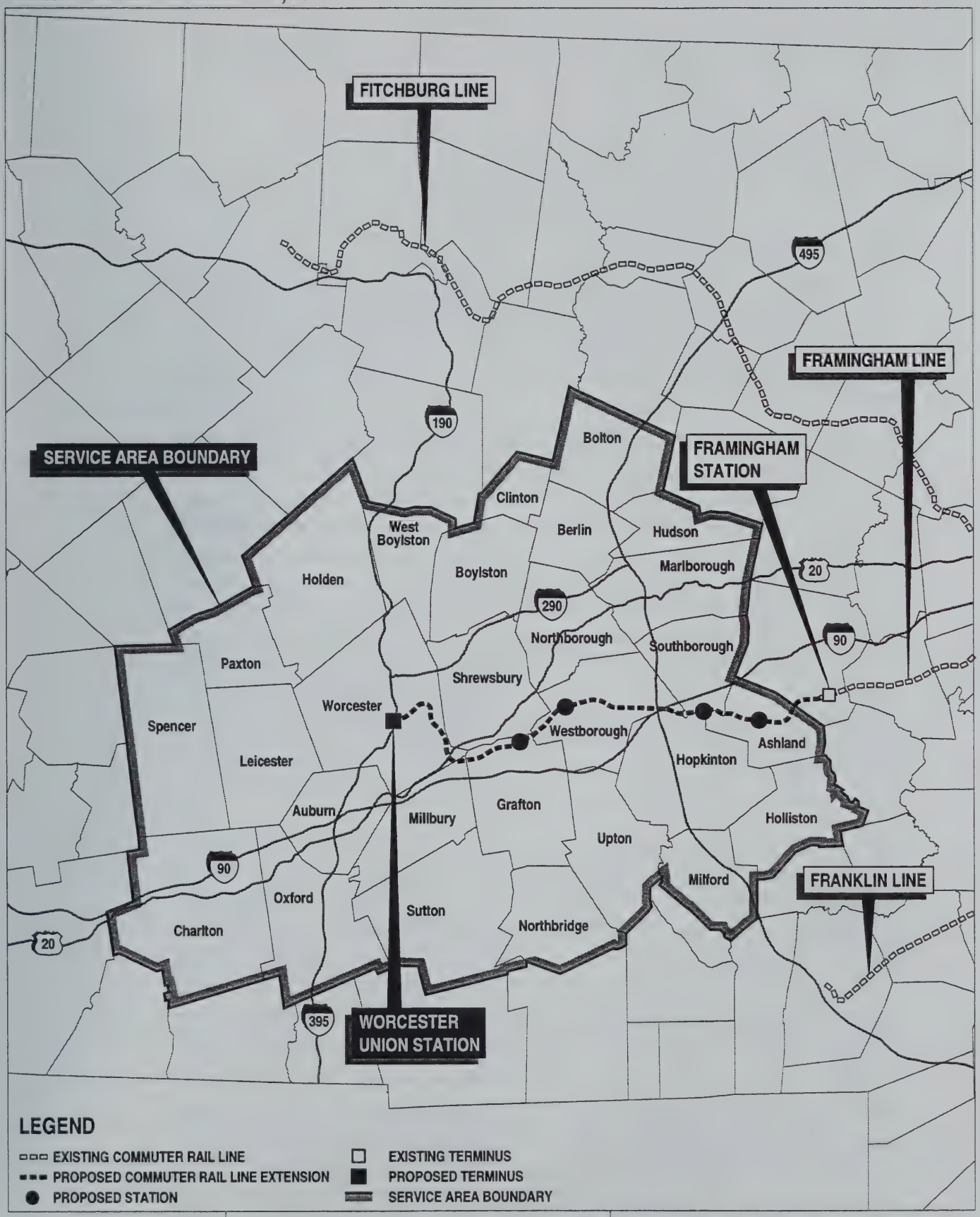
Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 6 Miles

0 6

PROJECT CORRIDOR

FIGURE 1.1-2



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 6 Miles

0 6

PROJECT SERVICE AREA

FIGURE 1.1-3

1.2 History of Project

Project Background

The Worcester Commuter Rail Extension Project has evolved and taken shape as an integral part of the Commonwealth's regional transportation and environmental initiatives. As described below, the project is one of a number of proposed public transportation projects with short and long term regional transportation and air quality benefits.

During the late 1970s and early 1980s, the Commonwealth made substantial capital investments in mass transportation corridors in the metro-Boston region, e.g., the Red Line Extensions (north and south) and the Southwest Corridor (Orange line) Project. Later, the Commonwealth was engaged in planning the Central Artery/Tunnel Project to complete the Interstate Highway system in Massachusetts and to improve the capacity and safety of existing highway facilities. The environmental review of the Central Artery/Tunnel Project undertaken between 1987 and 1991 refocused the attention of state officials on the relationship between transportation systems and air quality and the role of mass transportation in a balanced transportation system. The ensuing debate produced convincing evidence that highway infrastructure improvements, despite their beneficial effects, must be accompanied by transportation demand management and demand reduction designed to achieve successful functioning of the regional transportation system as a whole and to minimize future growth in traffic volumes seeking to use the region's necessarily limited highway capacity.

New federal air quality mandates, particularly the 1990 Federal Clean Air Act Amendments discussed below, highlighted the need to construct mass transportation improvements and to devise other transportation strategies to achieve compliance with the Standards of the Clean Air Act. The Central Artery/Tunnel Project (and other proposed highway improvements, such as the Route 146/Massachusetts Turnpike Interchange Project in Worcester and Millbury) served as the catalyst for discussion and formulation of a strategy to expand mass transportation capacity and to introduce new services to support existing capacity in tandem with other air quality improvement measures.

A key element of the Commonwealth's transportation and air quality strategy is the expansion and improvement of the commuter rail system. On September 27, 1990, the Secretary of the Executive Office of Transportation and Construction and the Secretary of Environmental Affairs endorsed the "Massachusetts Transportation Agenda" making improved mass transportation, including commuter rail expansion, among the Commonwealth's highest transportation priorities. Thereafter, the Executive Office of

Transportation and Construction identified a range of specific mass transportation improvements and made commitments to pursue a program of mass transportation improvements and control measures to reduce low occupancy vehicles use. These commitments are reflected in the record of environmental review and approval of the Central Artery/Tunnel Project, see e.g., the Secretary of Environmental Affairs' Certificate on the Final Supplemental Environmental Impact Statement, and the Massachusetts Highway Department's Section 61 Finding pursuant to the Massachusetts Environmental Policy Act. Many of the proposed transportation improvements and control measures are the subject of state regulations, amendments to the State Implementation Plan (SIP), and other public approval processes which either are ongoing or completed. The Worcester Commuter Rail Extension project is a state regulatory requirement, 310 CMR 7.36 (2)(c)(2), and an enforceable provision of the SIP.

MEPA Chronology

The Environmental Notification Form (ENF) for the Worcester Commuter Rail Extension Project was submitted to the Secretary of Environmental Affairs on August 17, 1992 and was noticed in the *Environmental Monitor* dated August 24, 1992.

Following the comment period, the Secretary on October 8, 1992 issued a Certificate establishing a Special Procedure for a Major and Complicated Project. This certificate established a Citizens Advisory Committee (CAC) to assist the Secretary in the review and evaluation of the environmental impacts of the project. The certificate on the ENF was issued on October 22, 1992, defining the scope of issues to be addressed in the Environmental Impact Report (EIR) required on the project.

A Draft EIR was filed for the overall project and was noticed in the *Environmental Monitor* of August 8, 1993. Many thoughtful comments were received on the DEIR concerning a wide range of environmental and financial issues. Given the need for significant additional information identified in the comments, the MBTA determined that it was appropriate to withdraw the DEIR in order to address the comments in a substantially revised document.

Concurrent with the request that the DEIR be withdrawn, the MBTA filed a Notice of Project Change on November 29, 1993, that proposed an interim commuter rail service to Worcester. After careful evaluation of the proposed interim service and its potential impacts, and taking into account the comments received on the Notice of Project Change, the Secretary issued a decision on the Notice of Project Change dated January 14, 1994 indicating that interim service would have limited environmental impact and could proceed without further review under MEPA.

A revised Draft Environmental Impact Report was filed with MEPA and noticed in the *Environmental Monitor* on December 7, 1994. Following an extended comment period, the Secretary of Environmental Affairs issued a Certificate finding the Draft Environmental Impact Report to be adequate on March 16, 1995 and outlining matters remaining to be addressed in the Final EIR.

Under the Special Procedure established by the Secretary for environmental review of this project, the MBTA later proposed two sequential Final EIR's, the first, for track improvements and layover facility, the second for construction of the intermediate commuter rail stations and implementation of rail service to those stations. A Notice of Project Change outlining this proposal was submitted to MEPA on May 12, 1995 and noticed in the *Environmental Monitor* on May 23, 1995. A Certificate on the Notice of Project Change was issued on June 22, 1995 in which the Secretary concurred with this proposal.

Due to the unresolved issues pertaining to the proposed Westborough, Southborough, and Ashland Stations, especially pertaining to their interaction around ridership and traffic and the need to address these three stations simultaneously, a subsequent Notice of Project Change requested that the planned second Final EIR for stations and railroad operations be split into two sequential FEIRs—one Final EIR for the Millbury and Grafton Stations and Railroad Operations, and a subsequent Final EIR for Westborough, Southborough, and Ashland Stations. The Notice of Project Change was filed with MEPA on October 31, 1995, noticed in the *Environmental Monitor* on November 7, 1995, and approved by the Secretary's Certificate dated January 10, 1996. A separate certificate on the same date, in response to a Notice of Project Change filed for the Framingham Terminal Development (EOEA No. 10106), and published in the *Environmental Monitor* on December 8, 1995, transferred MEPA review of the traffic and parking elements of that project to review under the Worcester Commuter Rail Extension environmental process.

The Final EIR for the Railroad Right-of-Way and Layover Facility, published and distributed in July 1995, was found to be adequate in a Certificate issued on September 14, 1995 by the Secretary of Environmental Affairs. The Final EIR for the Millbury Station, Grafton Station and Railroad Operations, published and distributed in March 1996, was found to be adequate in a Certificate issued on June 14, 1996 by the Secretary.

MEPA documents relevant to the development of this project's Final EIR are located in Appendix A of this volume.

Coordination with Affected Communities

The MBTA's public participation process for the Worcester Commuter Rail Extension Project began in January 1992 as part of the schematic design phase. During January, February and March of 1992, the MBTA and its consultant met frequently with officials and citizens from towns along the project corridor. Questions and concerns about the station sites that were recommended in the 1990 Feasibility Study were identified and discussed. Three intermediate station sites between Framingham and Worcester (Howe Street in Ashland, Fruit Street in Westborough and Pine Street in Grafton) had been identified in the Feasibility Study. The Fruit Street site in Westborough and the Howe Street station site in Ashland were not popular sites with nearby residents and generated much discussion during these early public coordination meetings.

At the outset of the schematic design phase, it became clear that some of the stations identified in the Feasibility Study would not survive the more detailed engineering evaluation and public review that is undertaken during the schematic design phase. Issues of adequate access, land availability, and track geometry were among the obstacles that were identified during this early period of public participation. Therefore, the first element of the schematic design phase became the re-evaluation of potential station sites along the entire rail corridor.

During the station site identification process, most of the communities along the rail corridor between Framingham and Worcester established special citizen committees to study the issue of siting a station in their town. The initial public participation process for the project focused on meeting with these committees or boards of selectmen of the towns along the corridor to explain the site selection criteria and re-assessment of the station sites identified in the Feasibility Study.

The Westborough Advisory Committee was appointed in August of 1991 by the Westborough Selectmen in anticipation of the MBTA extension project.

The Ashland MBTA Rail Committee was appointed by the Ashland Selectmen on March 16,1992. The committee prepared a report for the Selectmen titled *"Should There be a Commuter Rail Station in Ashland?"*. The report evaluated nine potential sites and recommended a site on Pleasant Street.

The Millbury Committee was appointed by the Millbury Board of Selectmen on September 8, 1992.

The Southborough MBTA Study Committee was appointed by the Southborough Board of Selectmen in April 1992.

The Town of Grafton participated in this coordination process through its Board of Selectmen.

The City of Worcester coordinated with the MBTA through the Worcester Area Chamber of Commerce and the Mayor's Office of Planning and Community Development. The MBTA will continue coordination of commuter rail issues with the Worcester Redevelopment Authority and Worcester Regional Transit Authority, co-proponents of the Union Station restoration project, which is undergoing a separate MEPA review (EOEA No. 9521).

Citizens Advisory Committee

Under the Certificate of the Secretary of Environmental Affairs Establishing a Special Procedure for a Major and Complicated Project, a Citizens Advisory Committee (CAC) was formed to assist the Secretary in review and evaluation of the environmental impacts of the project.

Members of the CAC included two or more representatives from each community and included some elected or appointed officials, members of town rail committees, and representatives of transportation and planning organizations. In January 1993, the Secretary designated a 28 member CAC. On July 10, 1995, the Secretary called for a redesignation and expansion of the CAC to include representation by Hopkinton and Framingham.

During the course of its environmental studies on the project, the MBTA and its consultants met with the CAC as frequently as once a month to discuss the project's progress and to allow the CAC to review preliminary environmental documents. These meetings usually were broadcast on the local public access cable TV channel and reported in various newspapers. The CAC also has visited each of the proposed station sites and the Worcester Layover Facility on field trips sponsored by the MBTA.

Under the provisions of the Special Procedure, this Final EIR was submitted for review by the CAC prior to submission for MEPA to review.

1.3 Permits and Approvals

The MBTA has initiated project planning and conceptual design consistent with the requirements of the following environmental permits and approvals likely to be needed. Coordination by the MBTA with federal, state, and local agencies, the CAC, and interested groups and individuals, will continue during review of this Final EIR and thereafter through final design, permitting, and construction.

Notice of Construction (EPA)

The project, or some of its elements, may require a notice of construction commencement to Region I of the United States Environmental Protection Agency.

Notice of Construction (DEP)

The project, or some of its elements, may require a notice of construction commencement to the Massachusetts Department of Environmental Protection.

Conformity Analysis (Boston MPO)

The project is included in the Clean Air Act conformity analysis for eastern Massachusetts performed by the Executive Office for Transportation and Construction and reported on in the *Boston MPO TIP (FY1997-FY1999, August 28, 1996* Ch. 2, Appendix A). No project-level conformity analysis is required.

Section 404 Permit, Federal Clean Water Act

The project would require a section 404 permit for any fill contemplated in federally delineated wetlands. Since it is anticipated that the wetlands fill activities associated with the project will affect less than one acre, the project likely will be covered by a programmatic general permit administered by the U.S. Army Corps of Engineers. Based on analysis to date, it appears that the project may qualify as a non-reporting Category I activity under the programmatic general permit. In the event that the project does not meet the Category I thresholds, the MBTA would file an application with the Corps pursuant to Category II.

Section 401 (Water Quality Certification) Permit, Federal Clean Water Act

This permit is triggered by any permit required under the Federal Clean Water Act, and in particular, by the section 404 permit described above. DEP has the authority to issue water quality certification subject to the Massachusetts Water Quality Standards. DEP currently is in the process of consolidating its wetland protection programs in proposed regulations on water quality certification. Under the proposed regulations, federal and state wetlands will be considered cumulatively. As currently proposed, the project will fill more than 5,000 sf. of bordering vegetated wetland, a key threshold for purposes of water quality certification.

Section 402 (National Pollution Discharge Elimination System) Permit, Federal Clean Water Act

Under Section 402(p) of the Federal Clean Water Act, stormwater discharges "associated with industrial activity," including construction activity disturbing more than five acres,

must be authorized by an NPDES permit. EPA also is authorized to require NPDES permits for stormwater discharges from non-industrial activities, so-called "Phase II" discharges. It appears that the project is eligible for the general NPDES permit for construction. Unless a project related storm water discharge will contribute to a violation of a water quality standard or be a significant contributor of pollutants to waters of the United States, an individual permit likely would not be required. The MBTA will prepare storm water pollution prevention plans in accordance with the general permit requirements, including appropriate setbacks and other best management practices under the Massachusetts section 401 stormwater discharge certification for the general permit.

Orders of Conditions, Massachusetts Wetlands Protection Act

Any non-exempt activity that will alter a wetland resource area or be conducted in the 100-foot buffer zone must be evaluated and approved by the local conservation commission through filing of Notices of Intent for review. Notices of Intent for stations are in process. The August 1996 Rivers Protection Act, an amendment to the Massachusetts Wetlands Protection Act, provides controls which address alteration of or building on lands in the project area within 200 feet of each side of any perennial river/stream. The same Notice of Intent procedure cited above must be followed.

SECTION 2.0 PROJECT ELEMENTS

Introduction

This Final EIR addresses the construction and operation of commuter rail stations in Westborough, Southborough, and Ashland. It is presumed that, in addition to the temporary Worcester Station terminus (ultimately to relocate to a multi-modal facility at Union Station), a local commuter station will be constructed and in operation in Grafton before the Westborough, Southborough, and Ashland stations open. The previously proposed Millbury Station (addressed in the 3/96 Final EIR) has been deferred, but may be built at a later date. The environmental impact of this deferral is addressed in Section 2.2.

The status of the Framingham Terminal Development project, the results of the Regional Station Study, and an update on the Worcester Layover Facility and Right-of-Way improvements, are included in this section. Construction costs, including Conrail force account work, are summarized also. The MBTA Mitigation Policy, which was presented in the November 1994 Draft Environmental Impact Report (DEIR) and the July 1995 and March 1996 Final Environmental Impact Reports (FEIRs), is still the baseline for proposed mitigation.

In order to understand the subject(s) of this Final EIR within the context of the whole project, Figure 2.0-1, Panels 1 through 9, Proposed Railroad Corridor Improvements, has been included in this section describing project elements. The figure appeared in the March 1996 FEIR as Figure 3.0-1.

Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2000'

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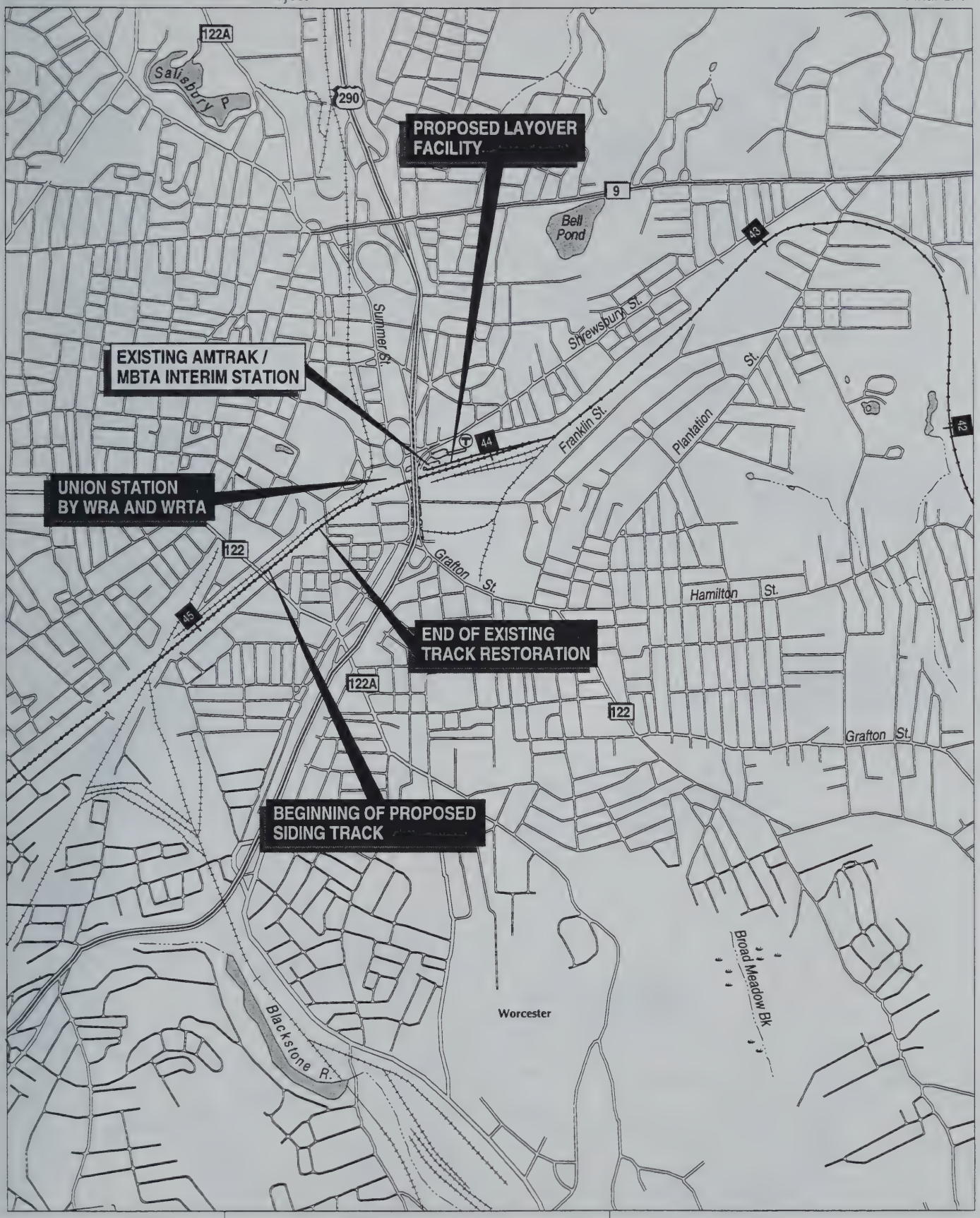
PROPOSED RAILROAD CORRIDOR IMPROVEMENTS

FIGURE 2.0-1 PANEL 1 OF 9



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2000'

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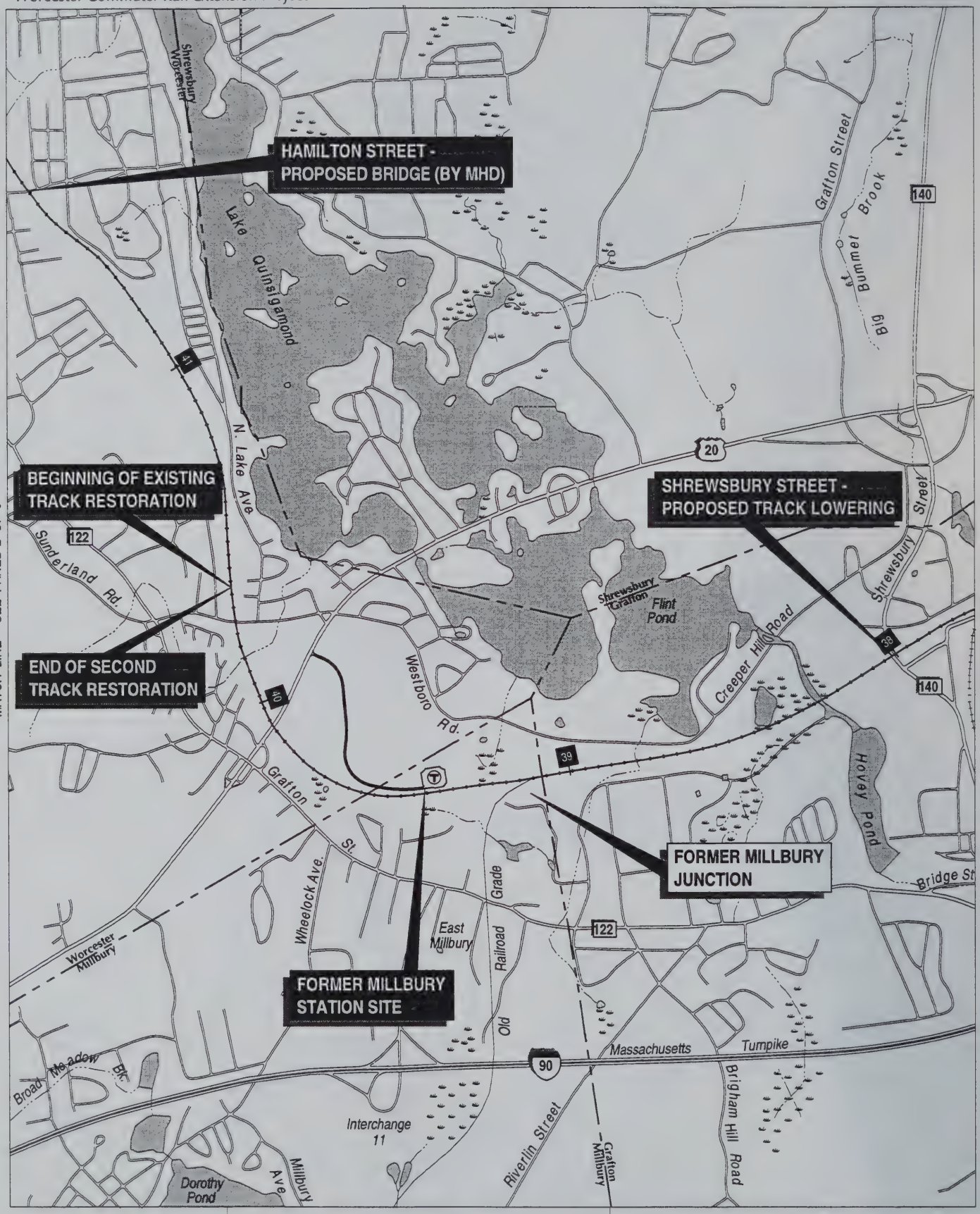
PROPOSED RAILROAD CORRIDOR IMPROVEMENTS

FIGURE 2.0-1 PANEL 2 OF 9



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2000'

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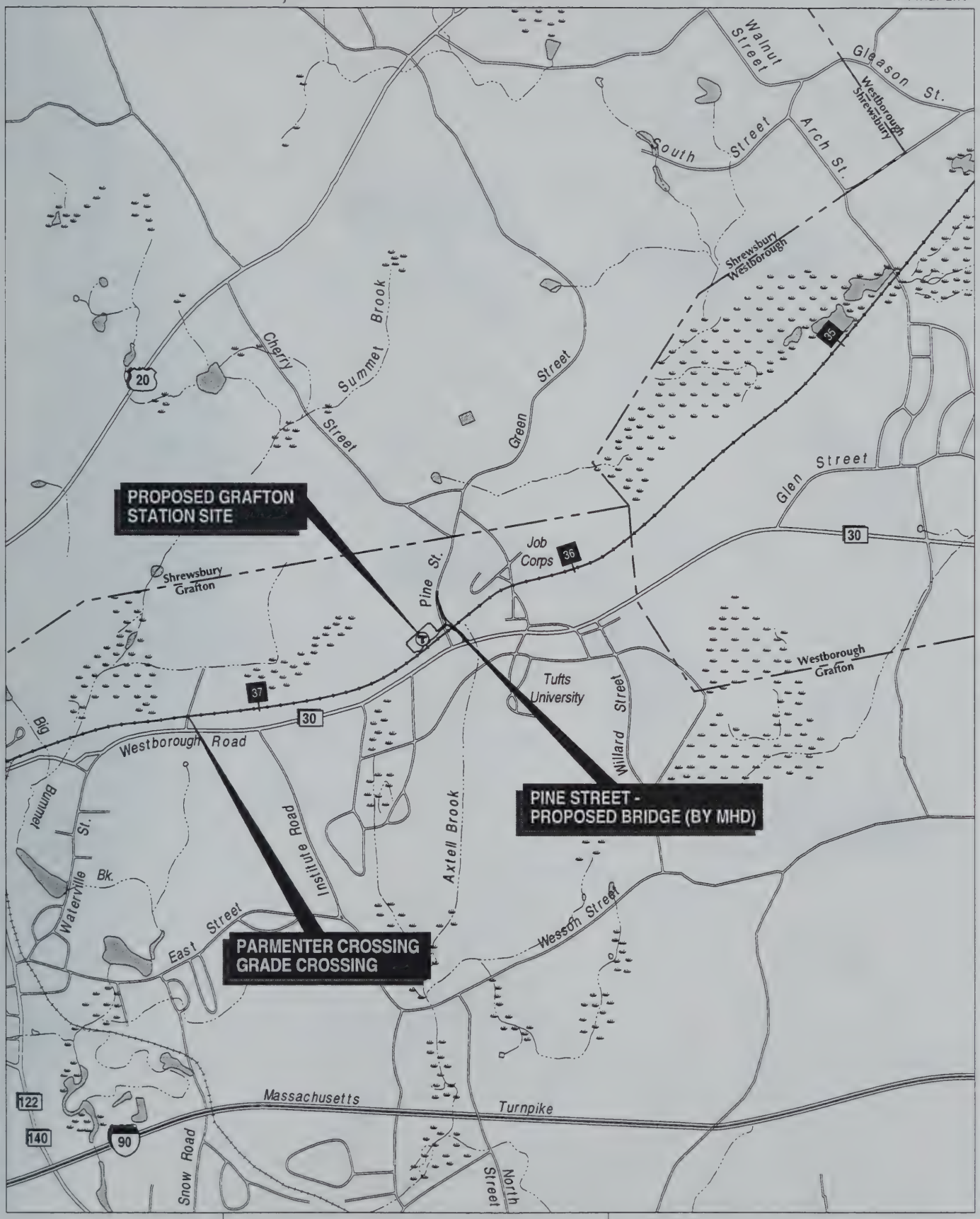
PROPOSED RAILROAD CORRIDOR IMPROVEMENTS

FIGURE 2.0-1 PANEL 3 OF 9



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2000'
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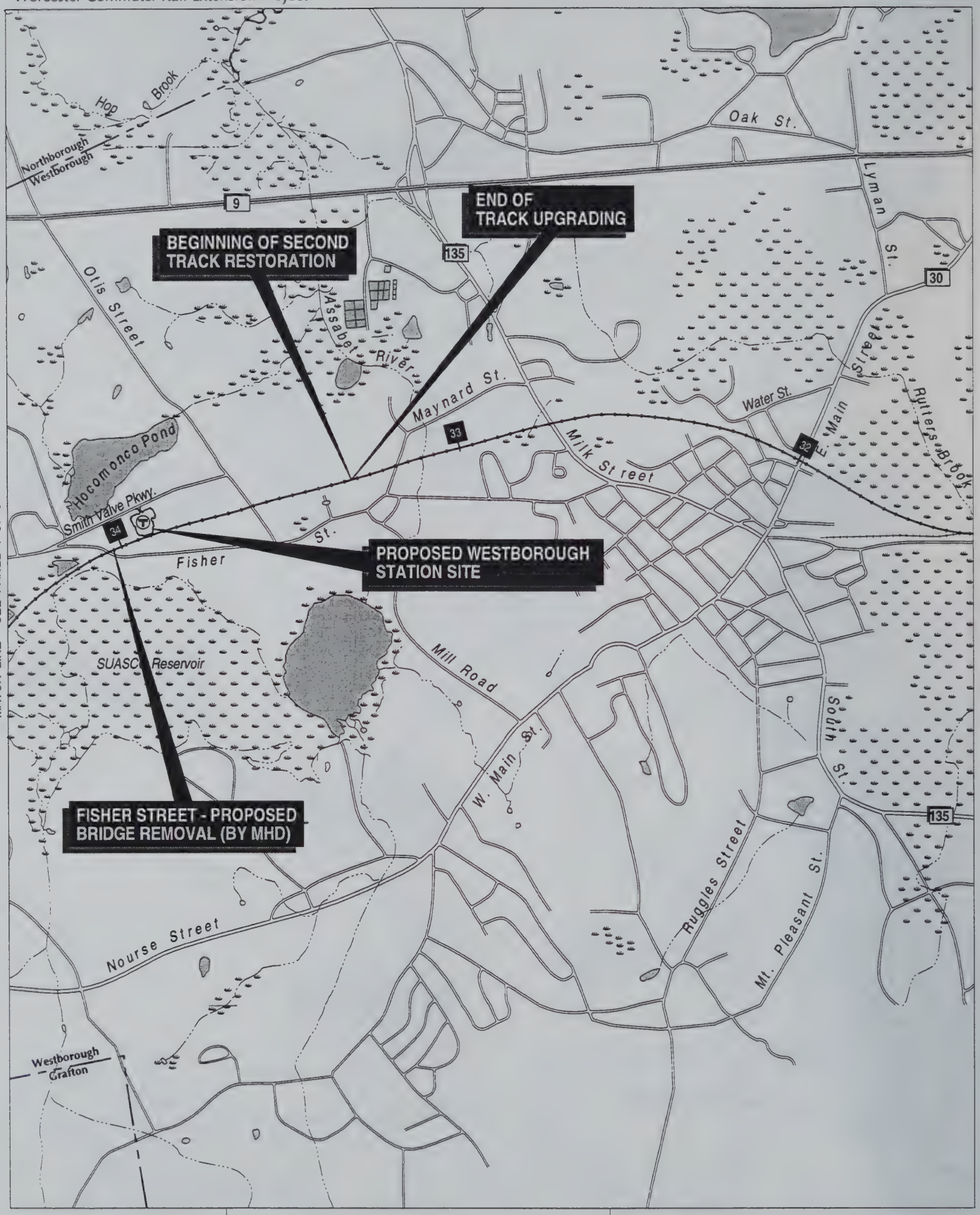
PROPOSED RAILROAD CORRIDOR IMPROVEMENTS

FIGURE 2.0-1 PANEL 4 OF 9



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2000'

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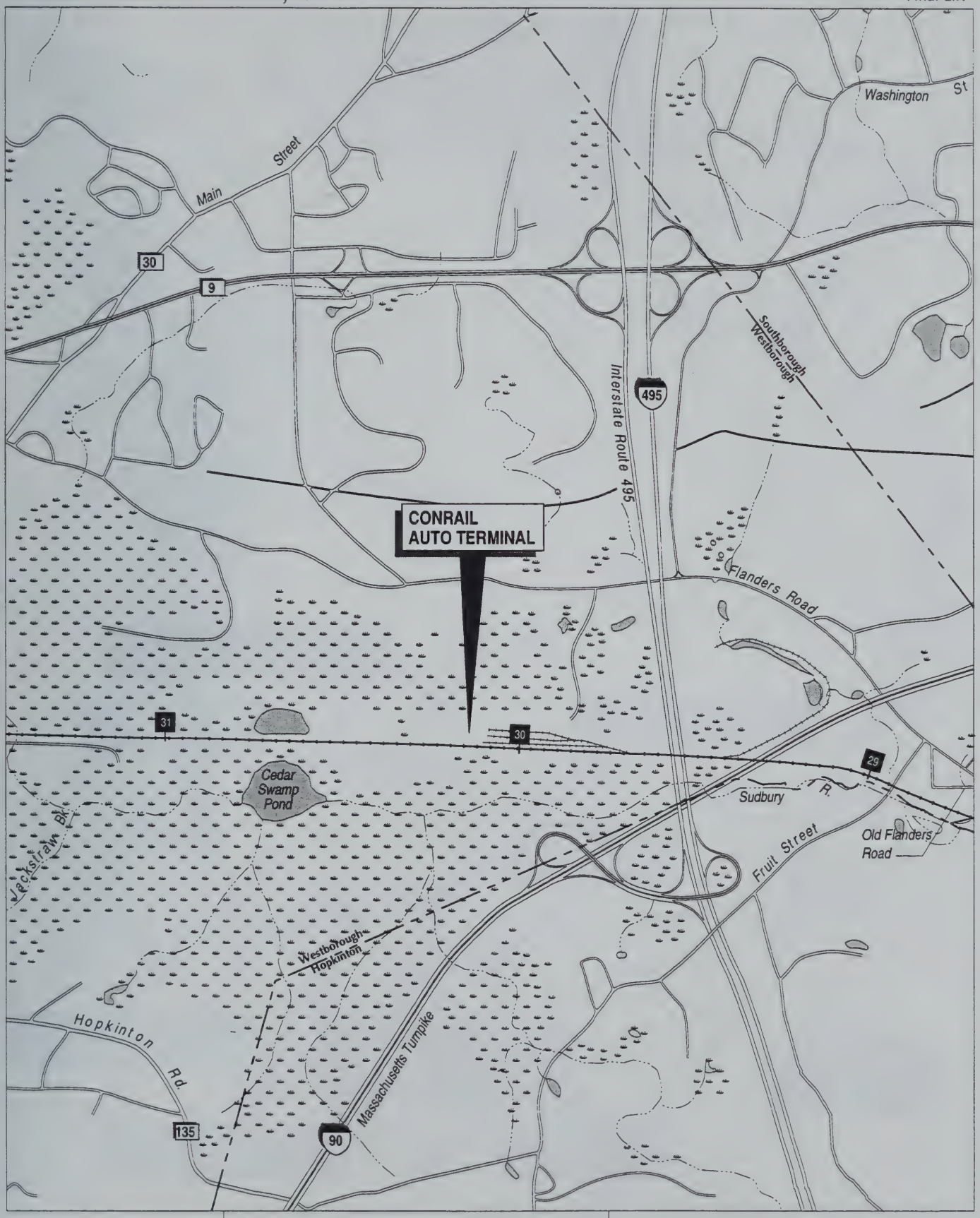
PROPOSED RAILROAD CORRIDOR IMPROVEMENTS

FIGURE 2.0-1 PANEL 5 OF 9



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2000'

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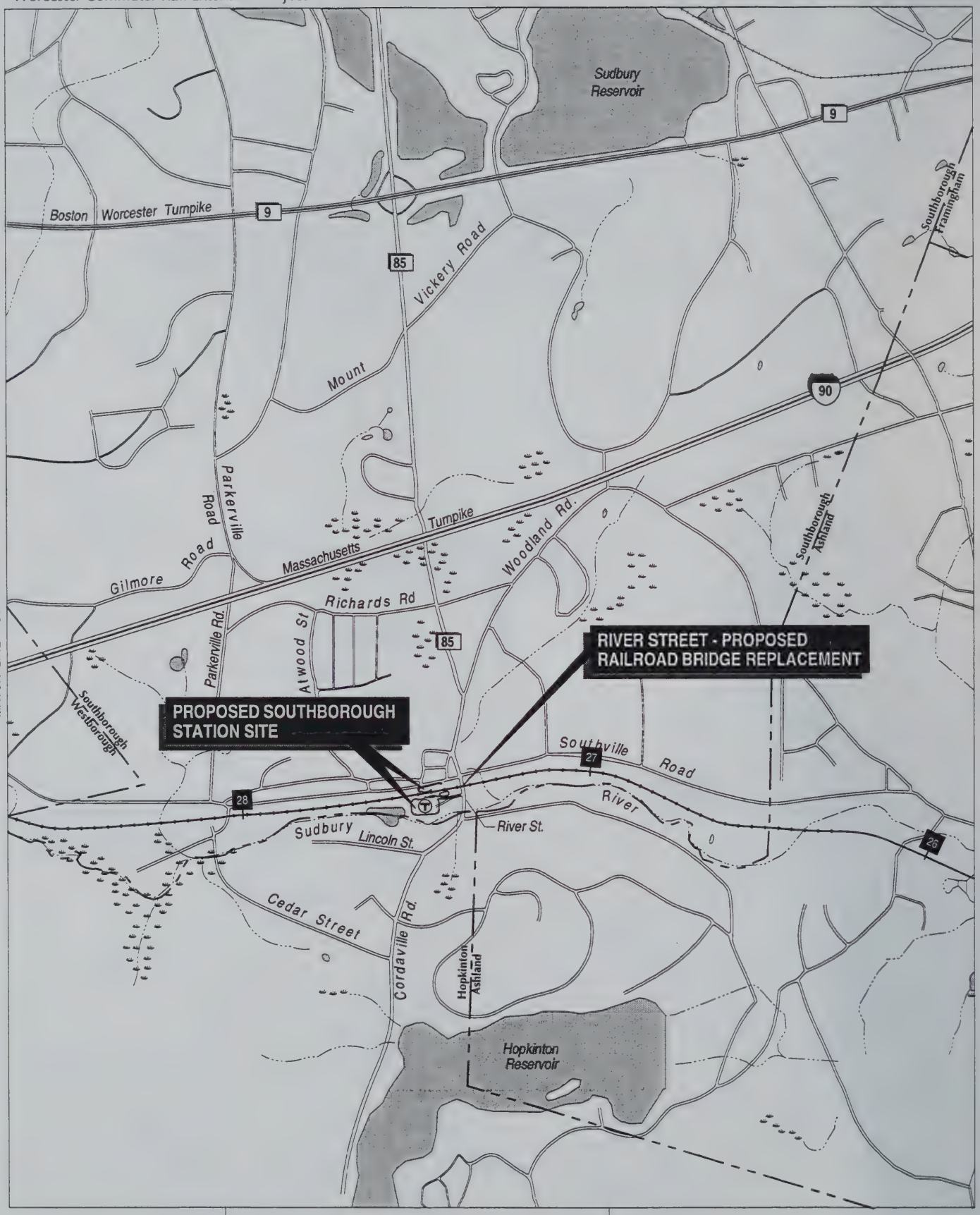
PROPOSED RAILROAD CORRIDOR IMPROVEMENTS

FIGURE 2.0-1 PANEL 6 OF 9



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2000'

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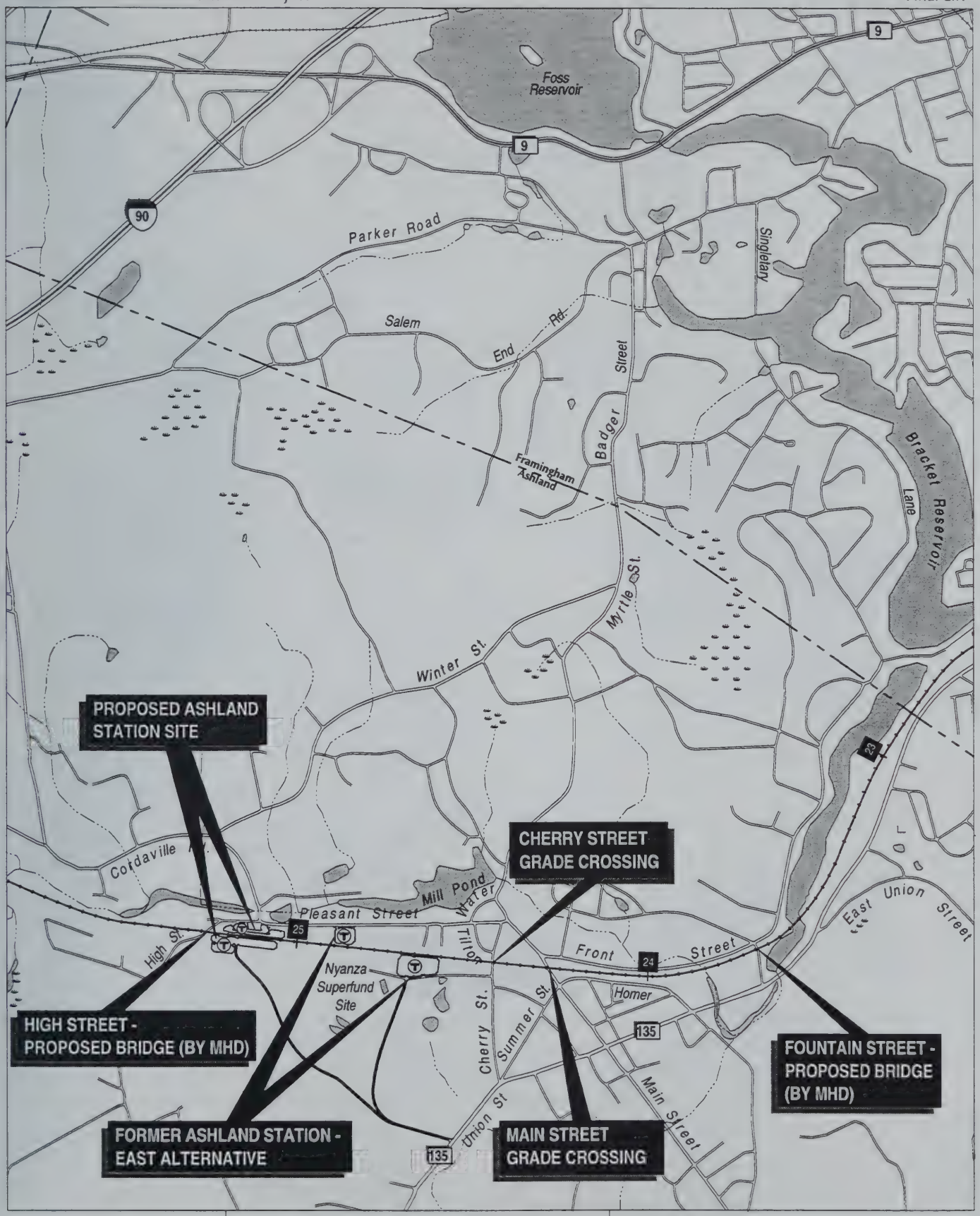
PROPOSED RAILROAD CORRIDOR IMPROVEMENTS

FIGURE 2.0-1 PANEL 7 OF 9



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2000'

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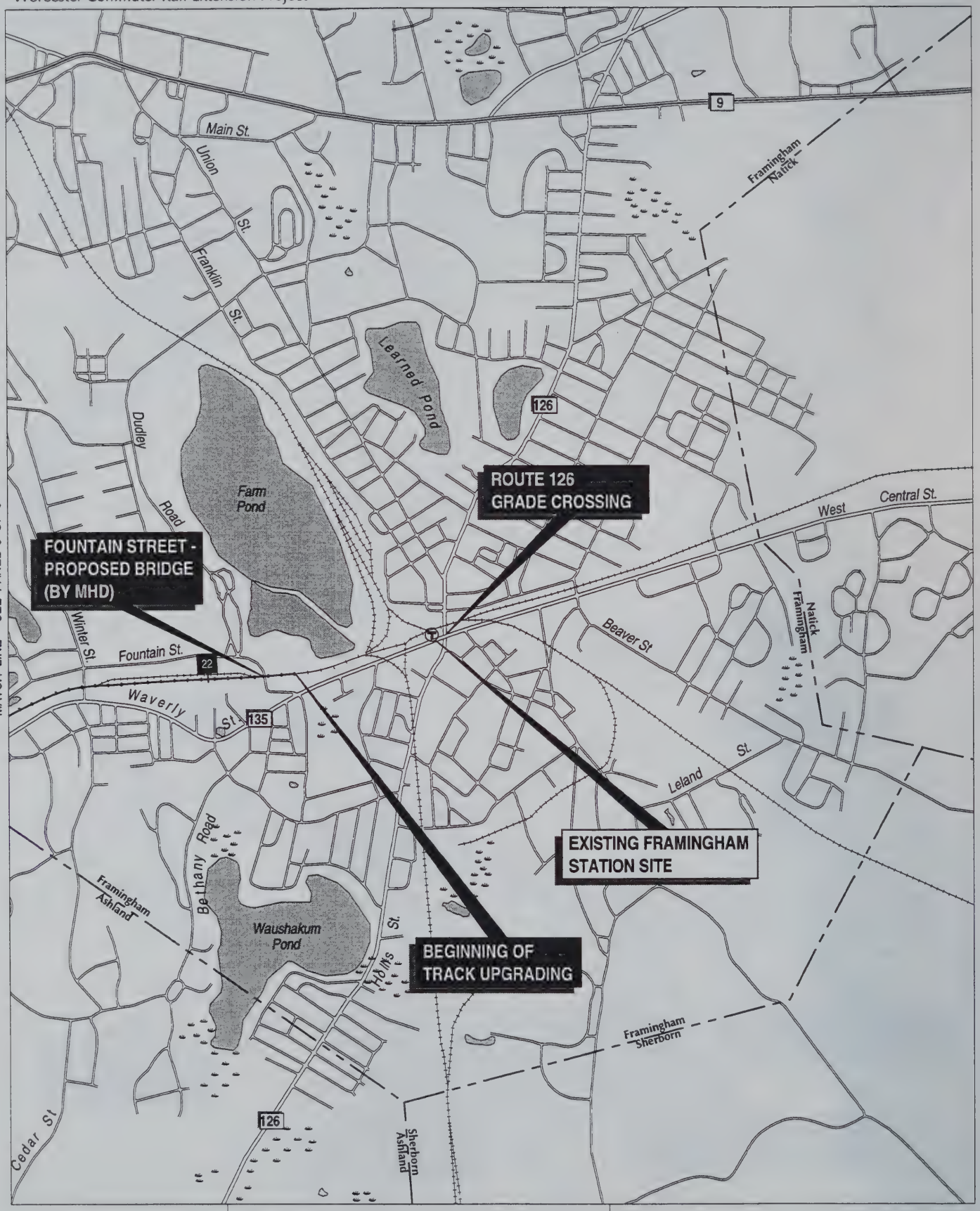
PROPOSED RAILROAD CORRIDOR IMPROVEMENTS

FIGURE 2.0-1 PANEL 8 OF 9



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2000'

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PROPOSED RAILROAD CORRIDOR IMPROVEMENTS

FIGURE 2.0-1 PANEL 9 OF 9

2.1 Commuter Rail Stations-Westborough, Southborough, and Ashland

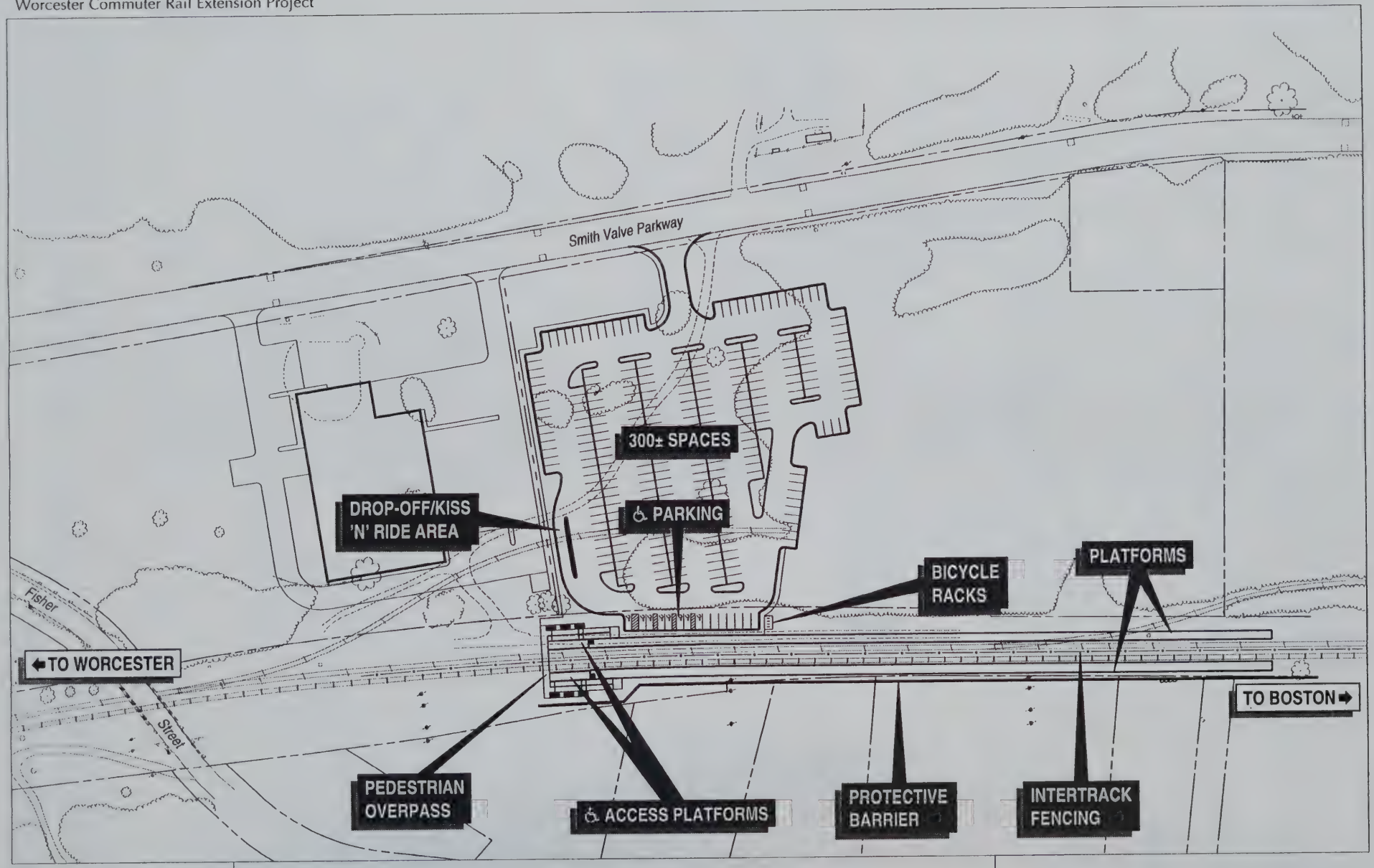
Westborough Station

The proposed commuter rail station in Westborough is located along the southerly side of Smith Valve Parkway, approximately one quarter mile west of the Otis Street intersection and about one and one quarter miles south of Route 9 (Figure 2.0-1, Panel 5 of 9, on page 2-6, and Figure 2.1-1).

The approximately 13-acre site consists of two distinct cover types. The northeasterly end is generally a low lying, wooded area with a combination of large and small trees, shrubbery, and grasses. Much of this area is classified as a wetland resource. The configuration of the parking lot is designed to minimize impacts to this area. The site slopes generally in a northerly direction falling away from the tracks and towards Smith Valve Parkway.

The westerly portions of the site, recently developed by the addition of the 5.0± acre Quirk Tire facility, were upland areas consisting of grass with a few scattered trees and shrubs, along with a privately-owned softball field and a railroad siding. This area of the site also slopes in a northerly direction towards Smith Valve Parkway. The proposed station will be located between the Quirk Tire facility and the wetland area and will minimize the number of trees to be removed.

The station will consist of 300 paved parking spaces, two 800-foot-long platforms, a drop-off area, a pedestrian overpass, lighting, and landscaping. The 800-foot-long platforms will be accessible to the handicapped by 45-foot-long access platforms; the parking lot will include reserved spaces for the handicapped adjacent to the platform. Station amenities include canopies, wind break screening along the access platform and at intervals along the low level platform, benches, bicycle racks, sites for telephones and newspaper vending machines, and train warning systems. Intertrack fencing will be installed for the length of the station to discourage pedestrians from crossing the tracks. As a safety measure, a protective barrier will be installed along the south side behind the station platform where it abuts residential properties. The barrier will consist of an earthen berm, fencing, and landscaping. The access platform (mini-high) is shown on Figure 2.1-4; the pedestrian overpass is shown on Figures 2.1-5 and 2.1-6.



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 150'
0 150'

SITE PLAN
WESTBOROUGH STATION

FIGURE 2.1-1

The preliminary site plan for the proposed Westborough Station is shown on Fig. 2.1-1. The configuration of the parking lot is subject to refinement during final design.

Potential impacts of the Westborough Station are described in Section 5.0.

Southborough Station

The proposed commuter rail station in Southborough is located just west of the Route 85 intersection with the mainline railroad (Figure 2.0-1, Panel 7 of 9 on page 2-8). Parking at this station will be provided on both sides of the tracks, as shown on the site plan (Figure 2.1-2).

The site north of the tracks is a 1.5-acre parcel which is currently partially occupied by a convenience/general store. The existing parking lot for the store is not well defined and the surface is a combination of asphalt, gravel, sand, and overgrown vegetation. The north side of the proposed station will consist of 90 paved parking spaces, an 800-foot-long platform, including a 45-foot-long handicapped access platform, a drop-off area, lighting, and landscaping. The general store will remain in its current location on the easterly portion of the site.

The area south of the tracks, bordered by the Sudbury River on the south, Cordaville Mill Pond on the west and Route 85 on the east, was the site of a textile mill dating from 1846. Extant are building foundations, raceways, stone arch bridges, roadways, a dam, and the mill pond. The site of the two largest mill buildings now is used as a contractor storage yard, and there is no visible evidence of the original structures. The historical and archaeological aspects of the station site area addressed in Sections 6.6 and 6.7 of this FEIR.

The proposed south side of the commuter rail station will consist of 330 paved parking spaces, an 800-foot-long platform, including a 45-foot-long handicapped access platform, a drop-off area, lighting, landscaping, a 400-foot-long access drive to Route 85, and all other station amenities cited previously under the Westborough Station. Intertrack fencing will be installed for the length of the station to discourage pedestrians from crossing the tracks. The station will be accessible for the handicapped.

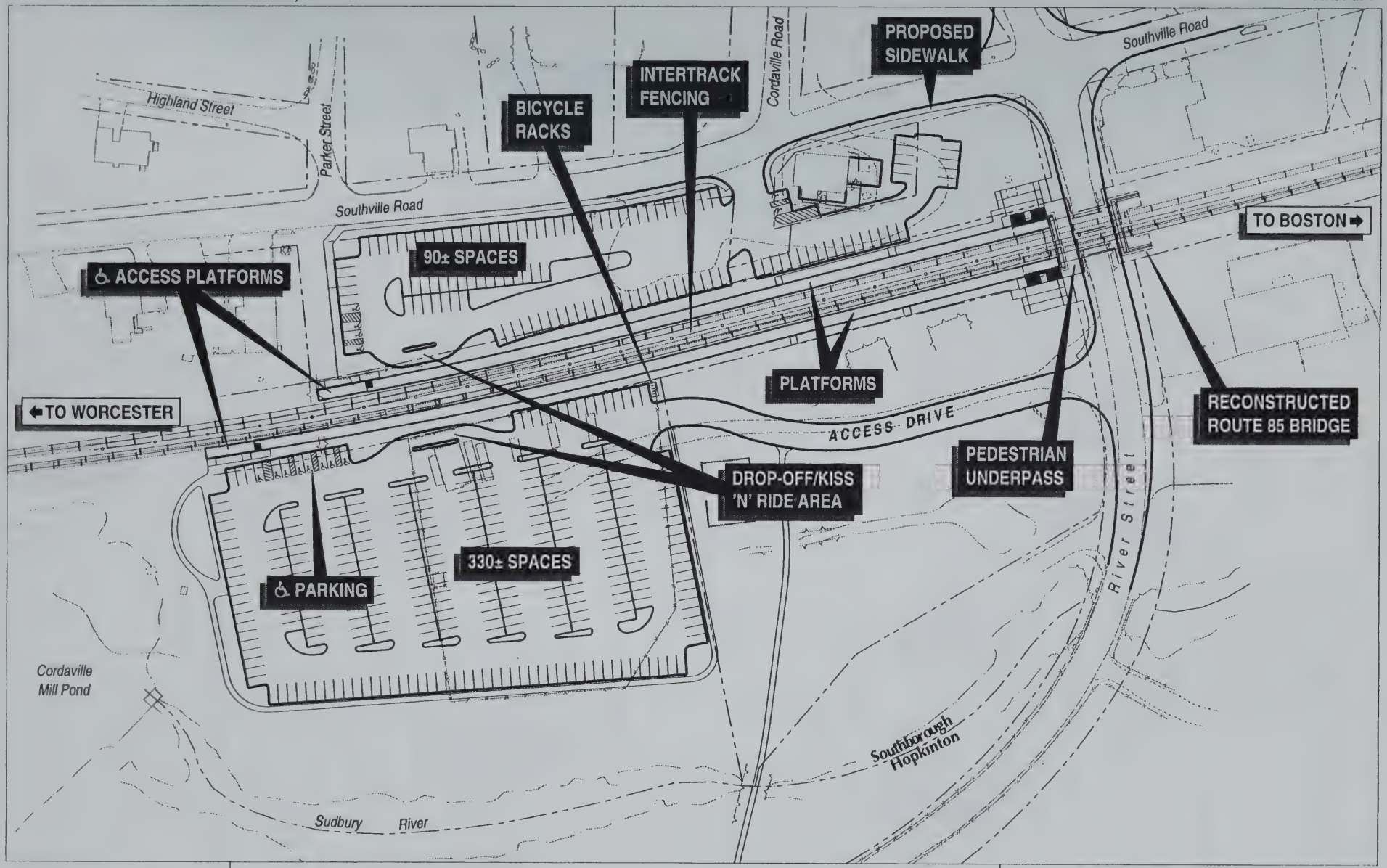
The layout, grading, and landscape design of the south side part of the site will allow public access and recreational activities. Some of the adjacent land is owned by the Sudbury Valley Trustees, with whom the design work related to recreation and access will be reviewed and coordinated.

The station site areas both north and south of the tracks typically lie two to six feet (2' to 6') below the existing track elevations. As such, the Southborough Station lent itself to consideration of a pedestrian underpass as an alternative to the standard overpass

previously described. Some discussions of the underpass alternative have already occurred. The MBTA policy is to not construct pedestrian underpasses, due to the vandalism and safety concerns expressed by commuters. Another railroad crossing alternative was to consider the use of an existing underpass located near the westerly end of the north side parking, but this underpass is severely deficient in width and headroom.

A third railroad crossing alternative included incorporating a pedestrian underpass at the Route 85 railroad bridge over River Street. As part of the bridge reconstruction, the span will be increased to allow for a wide sidewalk under the west end of the bridge with stairs and ramps connecting to the station platforms. This alternative has been selected for implementation. Work associated with design and construction of the bridge will be coordinated with the Massachusetts Highway Department, Conrail, and the Southborough Department of Public Works. The longer span railroad bridge also will accommodate a revised roadway configuration which will have a third lane for left turns from River Street to Southville Road. The entire intersection will be reconstructed, including a new traffic signal system.

Potential impacts of the Southborough Station are described in Section 6.0.



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 125'

0 125

SITE PLAN
SOUTHBOROUGH STATION

FIGURE 2.1-2

Ashland Station

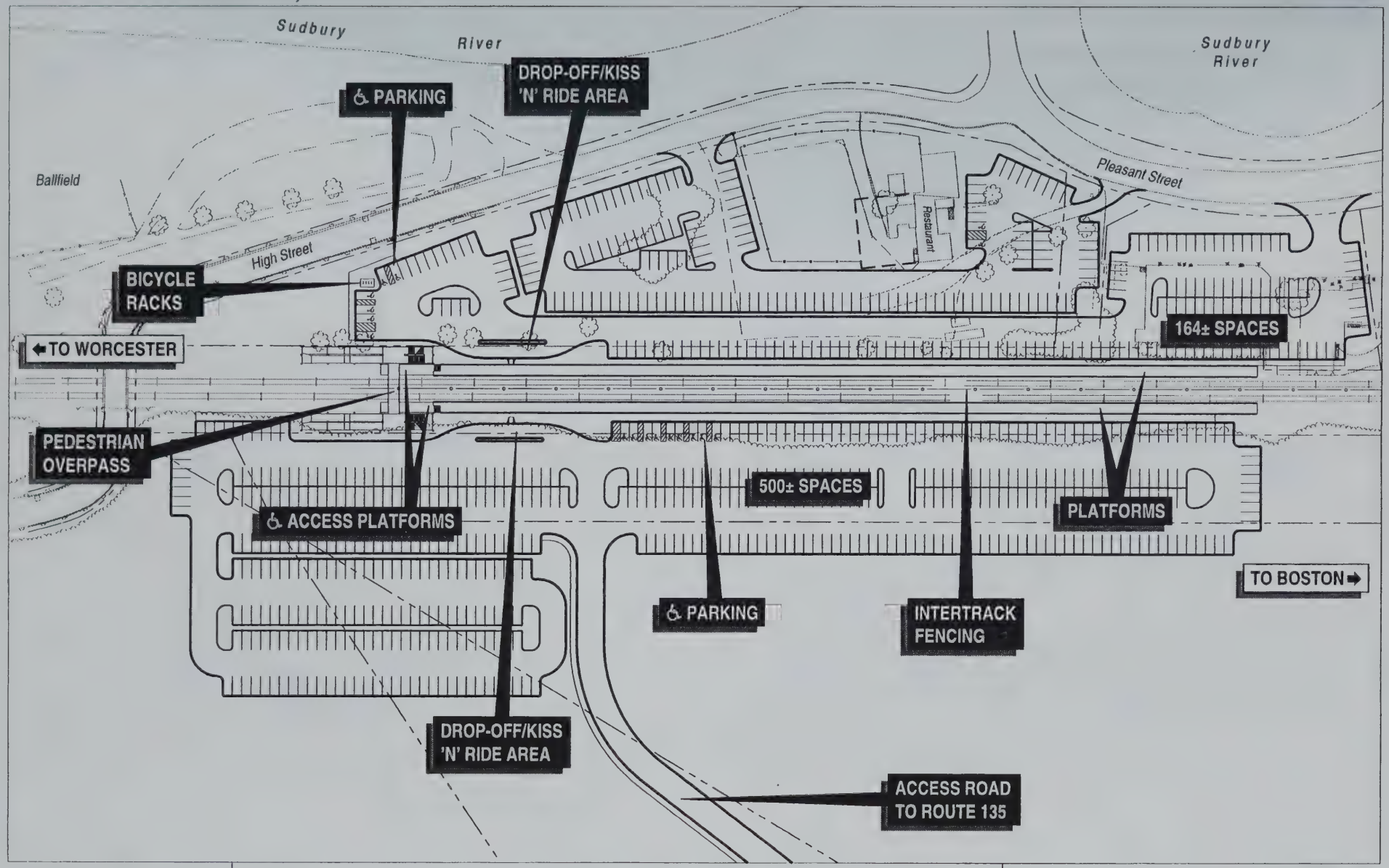
Two station site alternatives were evaluated for the proposed commuter rail station in Ashland. Designated as the "East" and "West" alternatives, they are described below and their locations shown on Figure 2.0-1, Panel 8 of 9, page 2-9.

The Ashland Station - East Alternative consisted of parking both north and south of the railroad tracks, with 200 parking spaces off Pleasant Street and 500 parking spaces off Route 135 (Union Street). The north site, consisting of two vacant parcels, lies in a mixed-use area with industrial buildings to the east, the Latter Rain Church to the west and residences across Pleasant Street to the north. The south site, located on Megunko Road, is an industrial area occupied by small businesses. The south site also is within the Nyanza Superfund site.

The Ashland Station - West Alternative was originally proposed as an option if the East Alternative was not feasible. Given the probability of 14 business displacements, the possible interaction with the Nyanza Superfund site, the staggered station platforms prompted by the long distance between the north and the south parking lots and in accordance with the wishes of the Town of Ashland, the East Alternative has been dropped and the West Alternative has been adopted as the proposed Ashland Station site. Since publication of the November 1994 DEIR, the station configuration, both north and south of the railroad tracks, has been revised (See Figure 2.1-3). It is still proposed that 200 parking spaces be provided in the north lot (164± plus a minimum of 36 commuter spaces daily in the adjoining restaurant parking lot) and 500 spaces in the south lot, 250 can be constructed initially with a further 250, if, and when, required. The north lot access will now be on Pleasant Street (formerly proposed on High Street); the south lot access will be from the previously proposed location on Route 135 (Union Street) via a 4,000-foot access drive. The easterly end of the north lot displaces a one-story, wood-frame office building. The site configuration of the south lot has been revised to minimize impacts to nearby bordering vegetated wetlands.

The station will include the 450 to 700 parking spaces noted above, two 800-foot-long platforms including 45-foot-long handicapped access platforms, drop off areas, a pedestrian overpass, lighting, landscaping and all other station amenities cited previously under the Westborough Station. Intertrack fencing will be installed for the length of the station to discourage pedestrians from crossing the tracks.

Potential impacts of the Ashland Station are described in Section 7.0.

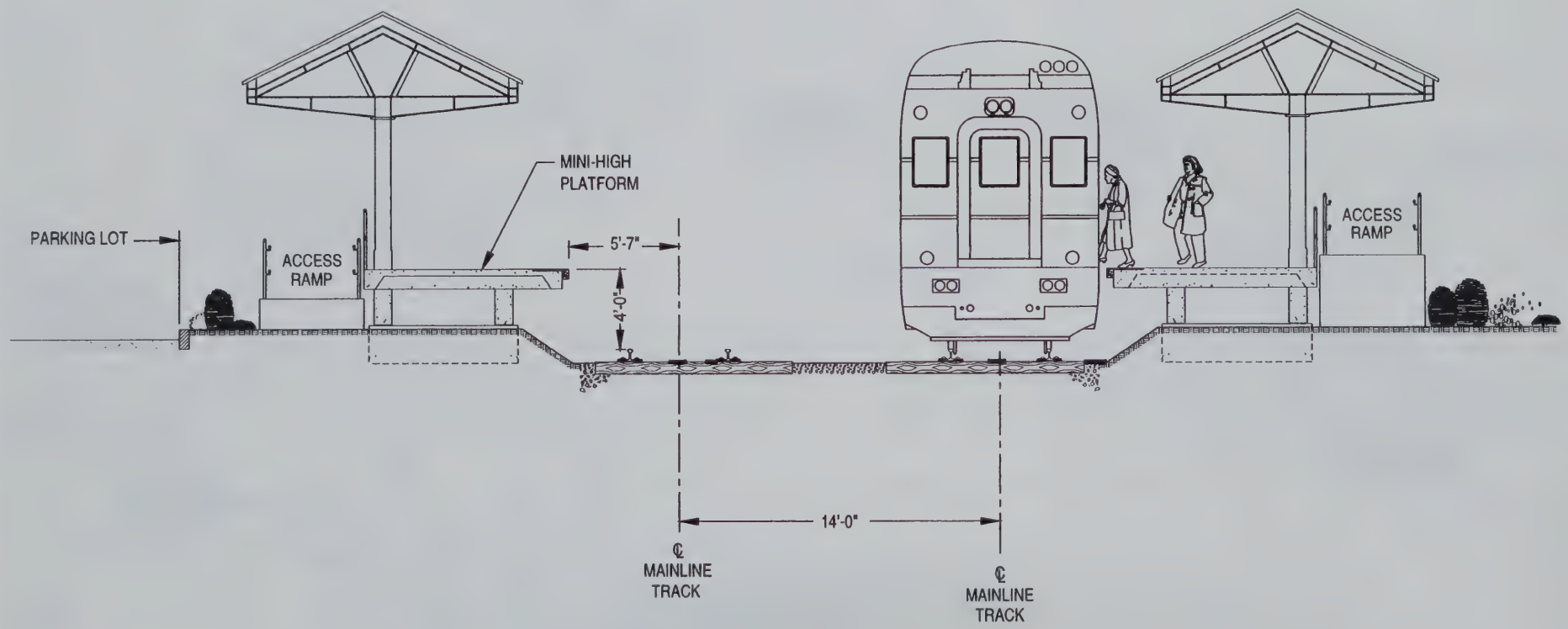


Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 125'
0 125

SITE PLAN
ASHLAND STATION

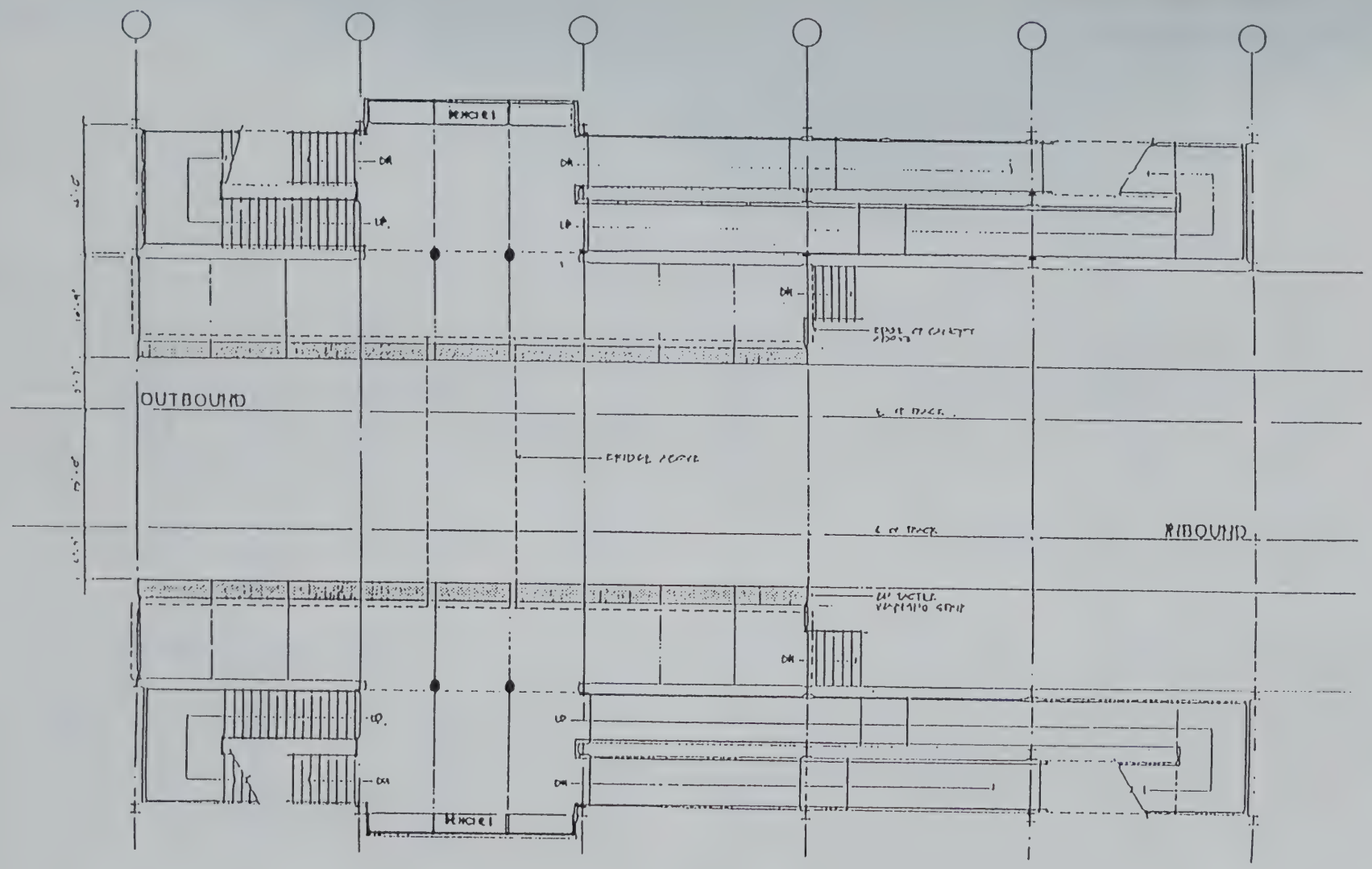
FIGURE 2.1-3



Massachusetts Bay Transportation Authority

TYPICAL SECTION - MINI-HIGH PLATFORM

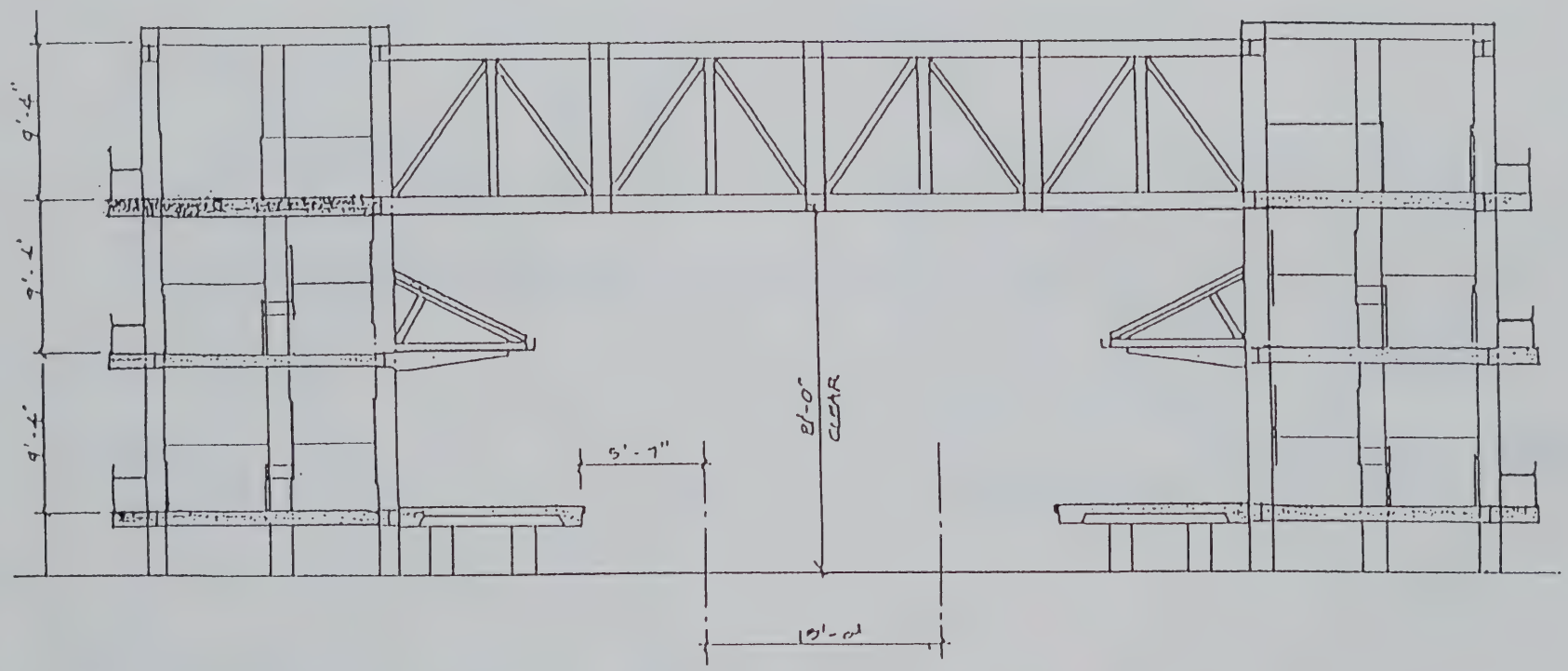
FIGURE 2.1-4



Massachusetts Bay Transportation Authority

PLAN - RAMP AND PEDESTRIAN BRIDGE

FIGURE 2.1-5



Massachusetts Bay Transportation Authority

ELEVATION - RAMP AND PEDESTRIAN BRIDGE

FIGURE 2.1-6

2.2 Commuter Rail Stations - Millbury and Grafton

Millbury Station

Two alternative station sites were evaluated for the formerly proposed commuter rail station in Millbury. The first would be accessed from Route 122 in East Millbury, opposite the Massachusetts Turnpike Exit 11 ramp terminus. The second station site would be accessed from Route 20 in Worcester. See Figure 2.2-1. The location of the station platforms is very similar for both alternatives.

The Turnpike Exit #11 access road provides a direct connection to Route 122 within ¼ mile of the railroad tracks. Based on the success of the Exit 11 park and ride lot, there appeared to be good potential for a station in this area. Opposition to a Millbury site located on the south side of the tracks and accessed from Route 122 began after the MBTA formally presented its plan to the Town Selectmen. A local citizen's committee was formed and the Selectmen appointed leaders of the citizen's group to the Millbury MBTA Rail Advisory Committee. The Advisory Committee strongly opposed the Route 122 access and instead suggested a station site north of the tracks and accessed from Route 20 in Worcester. At the request of the Town of Millbury, the MBTA reduced the size of the parking area to 300 spaces and agreed to consider a station accessed from Route 20.

After meeting with the Advisory Committee and analyzing and weighing the potential impacts associated with each of the alternative locations, the MBTA selected the Route 20 site as the preferred location. The driving forces for selecting this site were the reduced potential impact to local traffic and the anticipated positive effect on development in the Route 20 corridor.

The Route 20 site lies in a secluded area, just north of the tracks and somewhat westerly of the former Millbury Junction. The site is wooded and is bordered by the Worcester City line to the west and north, by a wetland resource area to the east, and by the railroad tracks to the south. The site slopes moderately, falling away in an easterly direction.

The access drive was to have been a new 3,000-foot-long roadway, beginning at a new intersection on Route 20 opposite the Big Y shopping center entrance. The westerly end of the station driveway would have traversed industrial property. The location the roadway has been designed to minimize effects on truck access to the businesses, and no buildings would have been acquired.

Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 800'

0 800

LOCUS MAP
MILLBURY STATION

FIGURE 2.2-1

Near the Worcester City line, the access road was to traverse one house lot of a recent expansion of an existing residential subdivision. A new street, which was constructed in 1995, has not yet been paved, and the impacted lot is vacant.

The station would have consisted of 300 paved parking spaces, two 800-foot-long platforms, including 45-foot-long handicapped access platforms, a drop-off area, a pedestrian overpass, site lighting landscaping and all other station amenities previously cited under the Westborough Station. Intertrack fencing was to have been installed for the length of the station to discourage pedestrians from crossing the tracks. The station would have been accessible to the disabled.

Due to a variety of concerns expressed by mainly Worcester residents, local officials and agencies, the Millbury Station has been deferred from the current commuter rail extension program. The projected 1996 ridership of 149 patrons, from the communities of Oxford, Charlton, Millbury, Auburn, and Worcester, are now projected to use the Worcester Station (11%) and the Grafton Station (89%) without any loss in patrons. A Millbury Station may be reconsidered in the future, at which time additional studies will be performed and Millbury-related comments made on the November 1994 DEIR and the March 1996 FEIR will be addressed.

Grafton Station

Several alternative station sites were evaluated for the proposed commuter rail station in Grafton, including the former station at North Grafton, a site at Parmenter Crossing, and a site at Tufts University, as well as the proposed station location at Pine Street. The site at Pine Street was selected for the following advantages:

- Minimum wetlands impacts
- Minimum environmental impacts
- Feasibility relative to track alignment
- General public acceptance
- State-owned property
- Potential for future expansion
- Proximity to Tufts Veterinary School
- Proximity to proposed BioTech development

The Pine Street site is located on the north side of the tracks and the westerly side of Pine Street, approximately 300 feet north of Westborough Road (Route 30). See Figure 2.0-1, Panel 4 of 9 on page 2-5, and the Site Plan on Figure 2.2-2.

The site area currently consists of approximately two acres of open meadow bordered by wooded areas on the north, east and west. The Conrail tracks abut the southern boundary of the site. Access is gained via a gravel driveway from Pine Street.

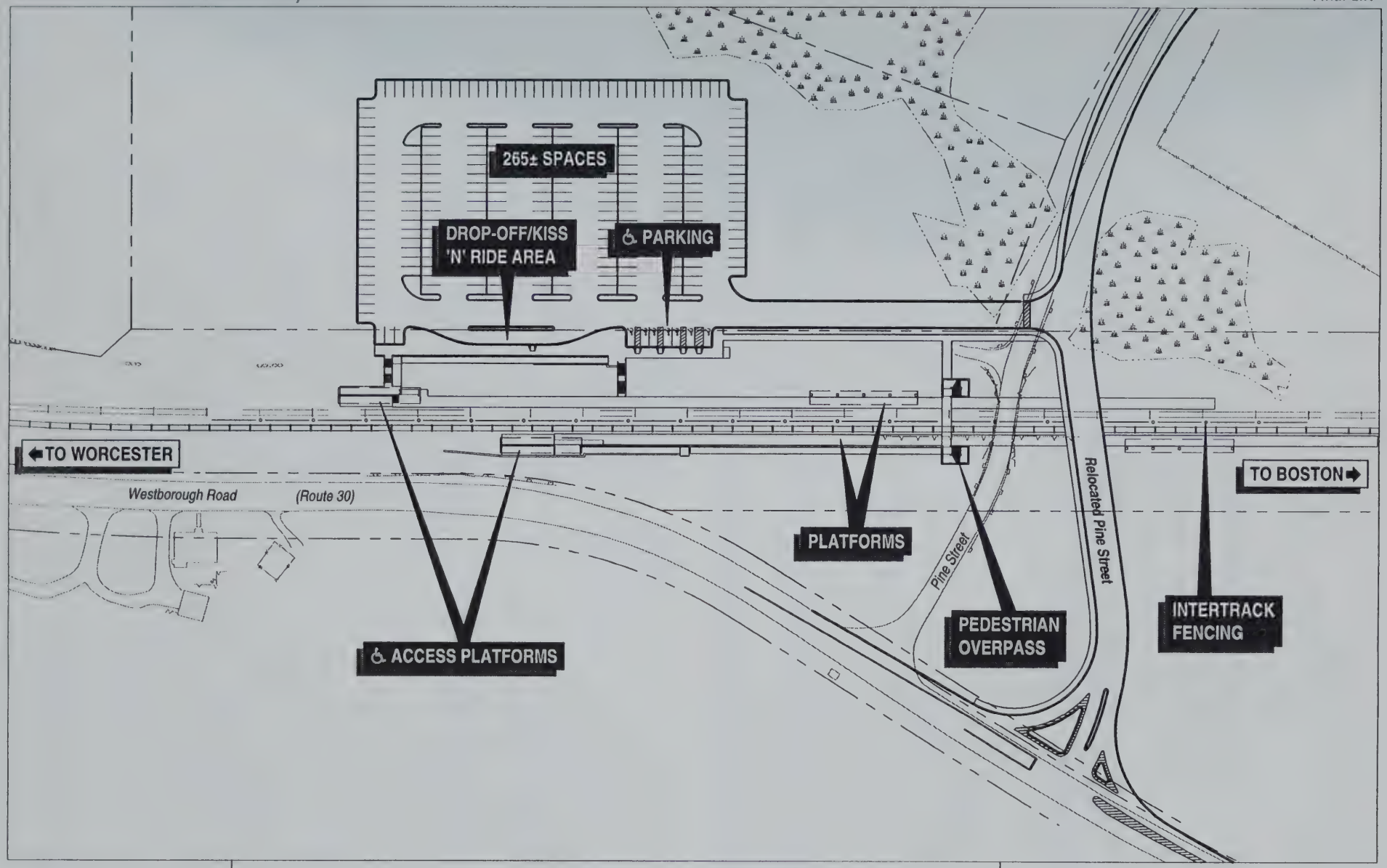
As presented in the March 1996 FEIR, the proposed station will include approximately 265 paved parking spaces (increased from the 248 spaces previously proposed due to parking lot reconfiguration), two 800-foot-long platforms, including 45-foot-long handicapped access platforms, a drop-off area, a pedestrian overpass, lighting, landscaping and all other station amenities cited previously under the Westborough Station. A new 200-foot-long driveway will be constructed providing access to the site from Pine Street. Intertrack fencing will be installed for the length of the station to discourage pedestrians from crossing the tracks. The station will be accessible to the disabled.

The Pine Street bridge adjacent to the station site is eligible for the Massachusetts Highway Department's ongoing program for replacement of functionally obsolete and structurally deficient bridges. Through interagency coordination, the MHD has agreed to schedule design and construction of the Pine Street bridge to be compatible with development of the commuter rail project. Design elements of the bridge project will include the following:

- Improved horizontal sight distance along Westborough Road (Route 30) from the proposed Pine Street intersection
- Increased Pine Street pavement width
- Provision of a sidewalk from Westborough Road to the station site

The bridge is under construction and will be operational within the same time frame as the Grafton Station.

The environmental impacts for the proposed Grafton Station were presented in the November 1994 DEIR and again in the March 1996 FEIR. The only difference in the March 1996 FEIR is traffic related. The FEIR analyzed station-related traffic impacts for three scenarios - Build All Stations, Build Millbury and Grafton Only, and Build Grafton Only. The traffic analyses show that generally the streets and intersections studied in Grafton currently operate at acceptable levels. The exceptions are for traffic turning from Waterville Street (Route 30) to North Main Street (Route 140), for traffic turning from Bridge Street to North Main Street (Route 140) and for southbound through traffic on Route 140 south of Bridge Street. The installation of a proposed traffic signal by the Massachusetts Highway Department at the Waterville Street/North Main Street intersection will improve traffic flow at this location. The MHD has advertised the project and anticipates that installation of the traffic signal will be completed prior to opening of the commuter rail station.



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 125'
0 125

SITE PLAN
GRAFTON, MA

FIGURE 2.2-2

The March 1996 FEIR analysis indicated that the addition of traffic volumes attributable to the proposed Grafton Station would not result in any significant adverse impacts on the roadways considered in this report. Station-generated traffic would not cause any study area street or intersection to deteriorate from an acceptable level of service to an unacceptable level of service. For both years 1996 and 2001, the analysis showed no significant change in levels of service for the signalized and unsignalized intersections and the roadway segments. The same applies to 1996 Millbury/Grafton Only, where impacts are insignificant.

Since the North Main Street/Bridge Street and North Main Street/Worcester Street intersections had unacceptable levels of service (LOS F) under the "No Build" condition, no mitigation was proposed. With elimination of the Millbury Station, additional patrons from the west and southwest of Grafton (132 patrons from the communities of Oxford, Charlton, Millbury, Auburn, and Worcester) will access the station via Route 122 (Worcester Street) from the west. All other access routes to the station will carry the same number of vehicles as presented in the March 1996 FEIR. The following table indicates the numbers of patrons and commuter vehicles for the various scenarios.

Table 2.2-1 Grafton Station Access Via Route 122 - West (1996)

Scenario	Grafton Station Patrons	% Access via Route 122	No. of A.M. Vehicles
Build All Stations	116	3.3%	3±
Millbury & Grafton Only	216	0.9%	2±
All Stations Less Millbury	248	54.7%	114±

The shift in ridership community of origin due to elimination of the Millbury Station is reflected in Table 2.2-1, in particular the number of riders projected to use Route 122 from the west. Of the 114 A.M. vehicles, 55 would occur in the A.M. peak hour and 74 would occur in the A.M. peak generator hour. Although the intersections noted above with existing poor levels of service did not warrant mitigation under the Build All Stations and Millbury & Grafton Only scenarios, it would appear that mitigation is in order under the current scenario which defers the Millbury Station. The mitigation proposed, which must be accepted by the Town of Grafton, would include the new siganlized intersection at Route 122/route 140 (See Figure 2.2-3). Changing the geometric configuration and signalizing this intersection will improve its operation to the level of serice "C". It is projected that 80% of the Bridge Street traffic which would have turned left on North Main Street (Route 140) enroute to the Grafton Station will use the new signalized intersection. The operation of the Bridge Street/North Main Street intersection will

improve to an acceptable level of service. Table 2.2-2 summarizes the levels of service in the year 2001 for the peak hour and peak generator hour during the A.M. and P.M. periods.

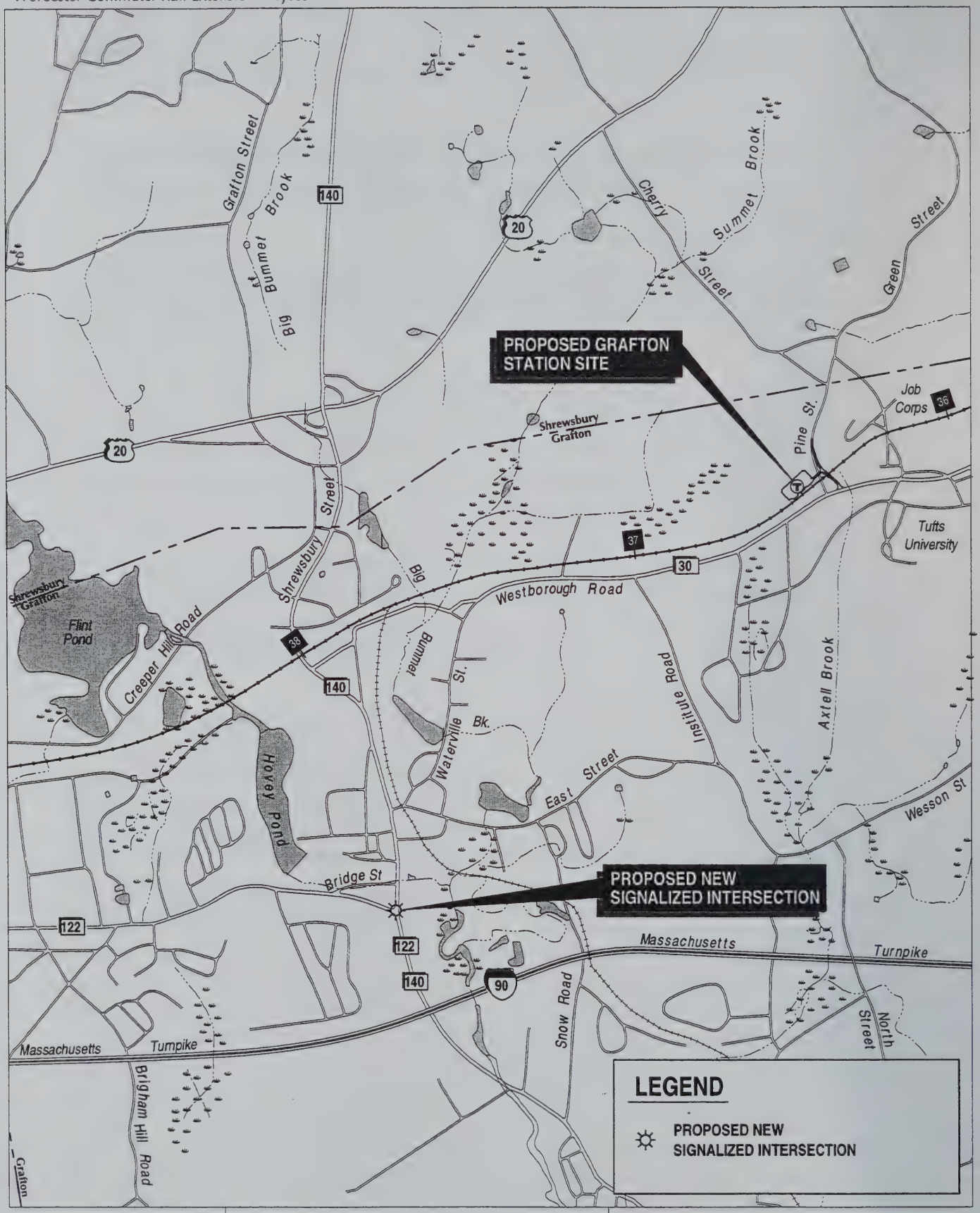
Table 2.2-2 2001 Signalized Intersection Level of Service

GRAFTON	Peak Hour		Peak Generator Hour	
	A.M.	P.M	A.M.	P.M.
N. Main St. and Worcester St.	C	C	C	B
Worcester - EB	C	C	C	B
Worcester - WB	C	B	B	B
N. Main - SB	D	C	C	C

The cost of intersection improvements and signalization is estimated at $350,000 to $400,000, and includes a cooperative effort from the town regarding right-of-way and permitting matters.

Construction Schedule and Sequencing

The construction contract for the Grafton Station was scheduled to be advertised in early 1997 with construction anticipated to commence in March 1997 and to be completed in the Fall of 1997. The MBTA has petitioned the MAAB to allow mini-high platforms on the Worcester Line. The request for variance was denied by MAAB and the MBTA is appealing in Superior Court. Construction of Grafton Station is on hold pending disposition of the appeal. The Westborough, Southborough, and Ashland Stations, assuming environmental clearance and acceptance by the host communities, are anticipated to be operational by the end of 1997, and should go on line within 60 to 90 days of each other.



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2000'

0 2000

PROPOSED GRAFTON STATION MITIGATION PLAN

FIGURE 2.2-3

2.3 Framingham Terminal Development (EOEA No. 10106)

Framingham Terminal currently serves as the MBTA's terminus for most Boston Metrowest daily commuter rail service. The Terminal is located within an active rail freight yard which is considered a local hub of Conrail operations. An Environmental Notification Form (ENF) for the Framingham Terminal Project was noticed in the *Environmental Monitor* on August 23, 1994. The proposed project is to improve commuter safety and accessibility, track operations, and parking. Phase 1 and Phase 2 improvements are addressed The project site is bounded by Waverly Street (Route 135) and Concord Street (Route 126) on the south and east respectively, by the Conrail yard and the MBTA commuter parking lot on the northeast, and by Farm Pond on the northwest. (See Figures 2.3-1 and 2.3-2).

The ENF addressed Phase 1 improvements only, including construction of a pedestrian overpass with handicapped access; extension of the commuter platforms with covered access; relocation of approximately 1,400-feet of track to increase track centers from a substandard 12 feet to 14 feet; installation of intertrack fencing; and construction of a commuter drop off/pick up area while increasing the 48 parking spaces off Waverly Street to 50 spaces (see Figure 2.3-2). Implementation of the Phase 1 improvements is anticipated in 1997 following completion of environmental clearance and final design. The pedestrian overpass has been altered by an elevator in lieu of ramps.

The Secretary of Environmental Affairs issued a Certificate on the ENF on September 22, 1994. The Certificate found that an Environmental Impact Report (EIR) would be required for the Phase 1 project. As proposed, the project involved the demolition of the existing platform canopy structure as a result of track relocation. Since the station building and related structures, including the canopy, are listed on the National Register of Historic Places, the project is categorically included for preparation of an EIR pursuant to MEPA Regulation 301 CMR 11.25 (20). The required EIR was limited to the potential impact to National Register properties; the other aspects of the Phase 1 project were allowed to proceed.

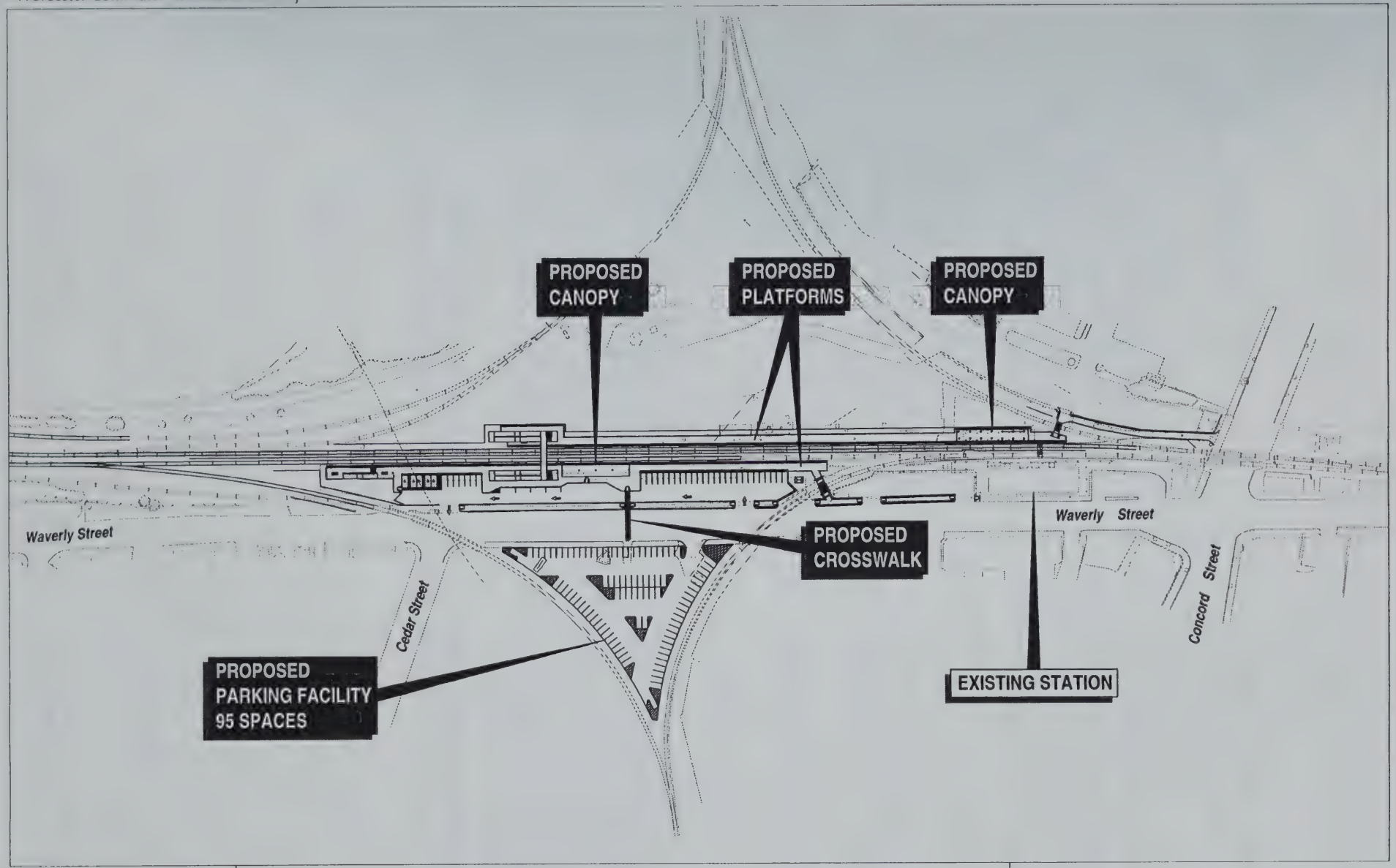
Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2000'

0 2000

LOCUS MAP
FRAMINGHAM STATION

FIGURE 2.3-1



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 200'
0 200

SITE PLAN
FRAMINGHAM STATION

FIGURE 2.3-2

In an effort to resolve the canopy issue, the MBTA submitted a Notice of Project Change on November 30, 1995. In the Notice it was proposed that the canopy be removed, restored, relocated, and thus preserved. Supporting documentation, including a basic agreement for the canopy preservation in a letter from the Massachusetts Historical Commission, requested that the Secretary of EOEA reconsider the requirement for an EIR. The Notice of Project Change package also requested MEPA to allow the MBTA to deal with traffic and parking concerns at Framingham as part of the ongoing MEPA review of the Worcester Commuter Rail Extension Project (EOEA No. 9154). In a Certificate issued on January 10, 1996, the Secretary agreed with both requests.

Since the issuance of the ENF, the Framingham Terminal Development has been revised to include the construction of approximately 95 commuter parking spaces on the south side of Waverly Street west of the Waverly Street/Concord Street Intersection (see Figure 2.3-2). The March 1996 Final EIR mitigation included a reconstructed signalized intersection at Routes 135/126 (Waverly Street/Concord Street).

Other issues relating to the Phase 1 project, including pedestrian access, are considered still to be part of that project and not part of the Worcester Commuter Rail Extension Project. The MBTA will resolve these other issues under the Framingham Terminal Development MEPA file, EOEA No. 10106.

Phase 2 improvements, which are considered an independent project from Phase 1, would include the construction of an additional 350 parking spaces in the Conrail north yard immediately north of the station platforms. Phase 2 is not currently programmed for construction. It is anticipated that a decision on Phase 2 will be driven by the need for additional commuter parking after the parking demand at Framingham is reduced significantly by the construction of commuter stations to the west in Westborough, Southborough, and Ashland.

Pertinent communications regarding the above matter, including the Notice of Project Change and the Certificate on the Notice, were included in Appendix B of the March 1996 FEIR.

2.4 Regional Station Feasibility Study

A Regional Station analysis was performed as part of the November 1994 Draft EIR (Section 17.0) for the Worcester Commuter Rail Extension Project. Issues presented included conflicts with wetlands, in particular designated Areas of Critical Environmental Concern (ACEC), access roadway and traffic concerns, and cost of the various alternatives. The MBTA made a decision that a regional station would be too costly overall, in particular for the small net gain in ridership, and would be impractical as a near-term goal in light of the anticipated environmental permitting process which was estimated to require several or more years.

The Massachusetts Legislature, in response to intense local interest in a possible regional station, included a mandate in the 1994 Transportation Bond Bill which directed the MBTA to perform a feasibility study for a regional commuter rail station in the vicinity of I-495. The study was performed separately from the Worcester Commuter Rail Extension Project's MEPA review, while employing pertinent information developed in the course of that review.

The study effort included the investigation and development of seven potential regional station sites in the I-495 area. Included in the study were eight options, which involved various combinations of a regional station with and without certain local stations. Based upon a site criteria list, developed in response to input from local residents and officials, alternative sites were selected for study. Against a background of land use, natural environmental considerations, traffic and access impacts, ridership estimates and economics, the practicality of all sites was evaluated. The Central Transportation Planning Staff (CTPS) developed a variety of ridership scenarios with and without a Regional Station. A draft of the study was distributed for comment to the appropriate regional and local agencies and officials and to interested citizens. No comments were received. The final report was issued in January 1996. See Executive Summary in Appendix B.

The final report focused on the same basic regional station issues presented in the November 1994 Draft EIR. Environmental issues and traffic access concerns can favor one alternative versus the others, but station cost for all alternatives is excessively high. The feasibility among alternatives varied. In the end, though, local response was critical. The Town of Westborough, through its MBTA Rail Advisory Committee, was initially in favor of a local station at the Smith Valve Parkway site proposed by the MBTA. Later, due to concerns about traffic and safety expressed by residents living near the proposed station site, a non-binding vote at Town Meeting strongly opposed the Smith Valve Parkway site, and in fact any local station site, while voting overwhelmingly for a regional

station, or at least consideration of a regional station. Finally, the March 1996 Westborough Town Elections included non-binding questions which addressed the local station/regional station matter. Support for a local station at the currently proposed Smith Valve Parkway site revived, as the voting results below show about 60% of those voting favored a local site; of those voting who expressed preference for a site, 55% preferred the Smith Valve site. Other sites are summarized below:

QUESTION NO. 1
DO YOU SUPPORT A LOCAL COMMUTER RAIL STATION IN WESTBOROUGH?

					Totals
Yes	319	302	651	675	1947
No	316	160	337	438	1251
Write-Ins	0	0	0	0	0
Blanks	7	11	17	14	49
Sub-Totals	642	473	1005	1127	3247

QUESTION NO. 2.
INDICATE YOUR SITE PREFERENCE BELOW:

					Totals
Bay State Site	155	93	210	231	689
Smith Valve Parkway	226	198	440	476	1340
Route 135 at Corrugated Paper	79	59	126	137	401
Write-Ins	1	0	0	0	1
Blanks	181	123	229	283	816
Sub-Totals	642	473	1005	1127	3247

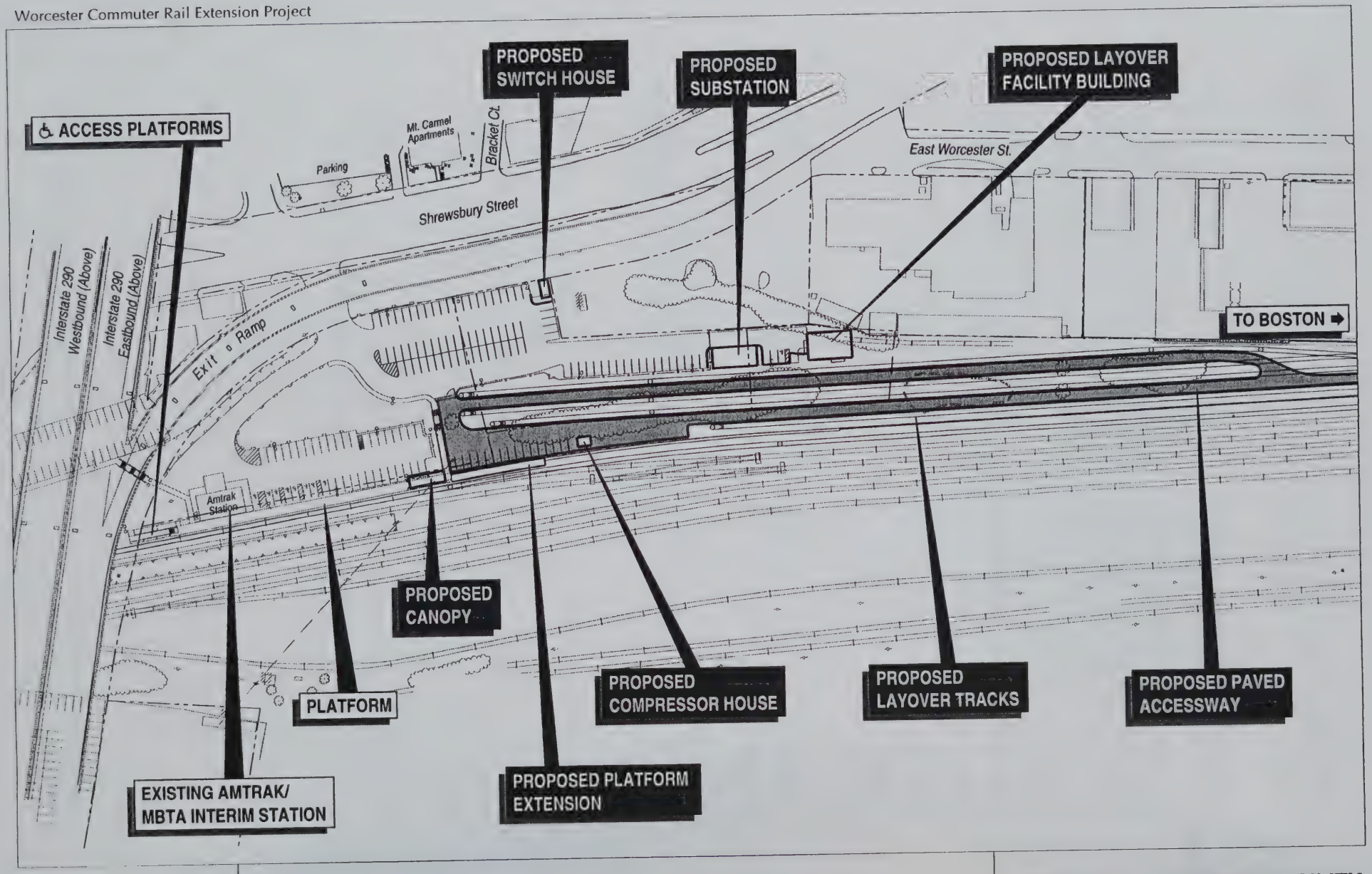
2.5 Layover Facility

The proposed layover facility is located adjacent to the Amtrak Station on Shrewsbury Street in Worcester which is the Worcester terminus. The facility is bordered by the Conrail yard to the south, by the Amtrak Station and Interstate Route 290 to the west, and by several industrial properties fronting on East Worcester Street and Albany Street (including City of Worcester DPW yards) to the north (see Figure 2.5-1).

The proposed Layover Facility has been sited near the project terminus in Worcester in order to eliminate the movement of empty trains (deadhead movement) back to a central facility at night and out to Worcester each morning where the service initiates. The proposed layover facility site can accommodate four 9-car train sets, and will include a maintenance building, electric substation, compressor house, associated access driveways, and employee parking areas.

The construction contract for the Layover Facility was advertised on June 23, 1995 and awarded in September 1995. Construction of the facility commenced in October 1995, after approval by MEPA of the layover facility Final EIR, and is scheduled to be completed by the end of 1996. The contract provides for certain modifications and improvements to the Worcester Terminus at the Amtrak Station including final paving of the main parking lot, extension of the passenger platform, and additional lighting and signing for passengers. The Interim Station will continue to support Worcester Rail passenger service until Union Station opens.

The Final EIR for the Railroad Right-of-Way and Layover Facility determined that the environmental impacts associated with the Layover Facility were modest and generally amenable to avoidance or mitigation. The major impact at the layover facility was attributable to noise, where an increase of about 1dBA in the day-night sound level is expected. In order to reduce this effect to the maximum practical extent, the MBTA has included in the Layover Facility construction contract provisions for wayside electrical power to eliminate the need for overnight idling of locomotives, thus virtually eliminating this potential noise source. In addition, the Layover Facility will include a wayside air compressor to maintain brake system pressures overnight, thereby substantially reducing morning warm-up idling requirements.



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 150'
0 150

SITE PLAN - LAYOVER FACILITY WORCESTER, MA

FIGURE 2.5-1

2.6 Railroad Right-of-Way

The MBTA Worcester Commuter Rail Extension service will operate over trackage owned and operated by Conrail. Although Conrail continuously maintains the rail corridor, upgrading and modifications to both the track and signal systems are required to accommodate the passenger service.

Much of the actual track and signal upgrade work is being performed by Conrail under a force account agreement with the MBTA. The remaining elements of the railroad right-of-way work will be performed under MBTA-managed construction contracts.

The MBTA "Trackbed Preparation" construction contract, which included preparing the trackbed for the seven mile section between milepost (MP) 33.2 in Westborough and MP 40.3 in Worcester, for the 1.4 mile section between MP 44.8 and MP 46.2 in Worcester, and for installing signal conduit in Framingham, was advertised on July 28, 1995 and awarded in September 1995. Trackbed work is essentially completed; Conrail force account work for track and signal improvements, currently in progress, began in early 1995 and should be completed by the Fall of 1997.

2.7 Estimated Project Cost

Before the project proceeded to environmental review, it was the subject of a detailed feasibility report requested by the legislature. The feasibility report cost estimates do not reflect all the costs of the project as now proposed to MEPA, as the project has been somewhat redefined since the feasibility report. An additional station has been added in Southborough. The new station will require additional signals and other infrastructure. Parking has been expanded beyond what the feasibility report covered. Revised cost estimates for required station access for the disabled have been incorporated. As currently proposed, the MBTA now estimates the project will cost $119 million, of which about $85 million will be for track and signal improvements, layover facility, stations and land acquisition costs, and impact mitigation, and $34 million for rolling stock. Table 2.7-1 provides a breakdown of the estimated costs. The MBTA plans to use state bond funds to cover the project's capital costs. Annual debt service will equal approximately $9.7 million, according to the MBTA's most recent estimate.

Table 2.7-1 Estimated Project Cost

Project Element	Estimated Cost	Project Element	Estimated Cost
Track and ROW Improvements		**Layover Facility**	
Trackbed Preparation	$3,500,000	Track and Fencing	$3,540,460
ROW Fencing	$300,000	Electrical System	$1,762,300
Bridge, Wall, Repairs	$2,300,000	Platform and Parking Lot	$235,550
Noise and Vibration Mitigation	$1,200,000	Maintenance Building	$410,000
Conrail Force Account Work			
New Interlockings (CP 22 to Worcester)	$8,573,186		
Second Track MP 33-40	$12,575,000	**Station/Parking Development**	
CP23, CP22, CP21 Modifications	$7,123,559	Ashland	$5,460,000
New Storage Track	$2,572,000	Southborough	$3,270,000
New Crossover CP 45	$982,951	Westborough	$3,669,000
Retire CP 44	$706,539	Grafton	$4,800,000
Route 85 Track Work	$615,455	Worcester	$1,500,000
		Land Acquisition	
		(station sites and layover)	$5,000,000
Subtotal	**$40,448,690**	**Subtotal**	**$29,647,310**
Total Rail and Site			**$70,096,000**
3% Project Administration and Field Inspection			$2,101,000
5% Contingency			$3,503,000
Environmental Reports and Engineering Design			$9,300,000
TOTAL CONSTRUCTION ESTIMATE			**$85,000,000**
Rolling Stock: (4 train sets)			$34,000,000
TOTAL PROJECT COST			**$119,000,000**

The 1994 Transportation Bond Bill passed by the State Legislature authorized $78 million for the project's capital costs and funding for the acquisition of locomotives and passenger coaches as well.

2.8 MBTA Mitigation Policy

The basic rule of thumb regarding mitigation of impacts resulting from the implementation of MBTA construction projects and other actions is that "if the MBTA breaks it, we will fix it." This policy is applicable to both the on-site and off-site impacts of the Worcester Commuter Rail Extension project. This mitigation policy has been discussed widely at Town Rail Committee meetings and at Citizens Advisory Committee (CAC) meetings and in previous Worcester Rail MEPA submissions. However, not all impacts cause "breakage". For example, with respect to traffic impacts resulting from commuter station generated traffic, some additional traffic at intersections and on roadway segments may not result in a significant impact, especially if the intersection or roadway will still operate at an acceptable level of service (LOS). If station generated traffic degrades the level of service from LOS D or better to LOS E or LOS F, corrective action will be proposed. If an existing condition reveals an unacceptable LOS for an intersection or roadway segment, and the addition of station generated traffic materially worsens that condition, every reasonable effort will be made to correct the problem created by the additional burden, generally in cooperation with MHD or the relevant town, according to jurisdiction. However, to mitigate such that the original deficiency is corrected may be infeasible in some cases. Moreover, "fixing," again using the traffic example, means restoring an acceptable level of service, LOS D in the project area, though often traffic mitigation could result in improvements better than LOS D.

Noise and vibration impacts resulting from the addition of commuter train operations are evaluated in terms of Federal Transit Administration (FTA) criteria, supplemented by the Massachusetts DEP noise policy. Train noise that is considered highly annoying for a given land use category or that results in an increase of more than 5 dBA will be considered for noise abatement measures. Site specific evaluations will address potential control measures which could include a strictly enforced equipment maintenance program, sound barriers, and directional train horns. Although no vibration induced damage from train operations is predicted, ground-borne vibration generated by MBTA trains will result in the increase of vibration events per day, rather than higher levels. Where (depending on land use category) the increase in vibration events is considered to be significant, potential mitigation measures could include a strictly enforced equipment maintenance program and the installation of ballast mats.

Recently adopted MBTA policy provides for the expenditure of up to 2% of the project construction cost for noise and vibration impact mitigation. Consideration of the cost effectiveness of any noise mitigation measures must be weighted against the actual relief provided.

Wetland impacts will be mitigated through compliance with the appropriate regulatory requirements. The primary thrust of the right-of-way and commuter station design effort will be to avoid wetland, floodplain and drainage impacts. Where total avoidance is not possible, the design will seek to minimize any wetland alteration and, where alteration is unavoidable, will include construction methods and control measures to reduce short-term and long-term effects.

This FEIR will present mitigation proposals where applicable. Mitigation and local benefit possibilities will continue to be discussed with the relevant towns throughout the MEPA review and the design process.

SECTION 3.0 COMMUTER RAIL OPERATIONS

Introduction

The proposed commuter rail service between Worcester and Boston will be an extension of the existing Framingham to Boston service. The rail line between Worcester and Framingham is owned and maintained by Conrail. The proposed commuter service will share operations on the line with existing Conrail freight and intercity passenger service by Amtrak.

This section provides a summary of the implementation schedule, including Interim Service which commenced on September 26, 1994 and Basic Service which will commence in mid-1997. Commuter rail fares and operating schedules are included also. Updated ridership estimates, prepared by the Central Transportation Planning Staff (CTPS), are summarized in this section. The complete ridership update is in Appendix D of the March 1996 FEIR. The effects of the new commuter service are discussed relative to the existing Framingham to Boston schedule.

3.1 Implementation Schedule

As an extension of the existing Framingham to Boston commuter rail service, Interim Service to Worcester commenced on September 26, 1994. The new service provides three daily round trips between Worcester and Boston.

In addition to the construction and operation of commuter stations in Westborough, Southborough, and Ashland, this Final EIR addresses the institution of a Basic Service commuter schedule as the schedule relates to the above stations and to the Grafton Station, which will be the only intermediate station on line for several months in 1997. Service to the Grafton Station should commence in the fall of 1997. The new service for all stations will be in operation by the end of 1997 and will provide ten daily round trips between Worcester and Boston.

3.2 Commuter Rail Fares and Schedule

The proposed Worcester Extension fare structure is identical to that of other MBTA commuter rail lines, using a zone assignment for each station stop based on travel distance from the terminal station in Boston. Table 3.2-1 shows proposed zone assignments for new stations on the extension and the current fare structure for those zones; the fares shown are those pertinent to typical commuters to Boston.

Table 3.2-1 Proposed Zone Assignments and Fare Structure Worcester Commuter Rail Extension

Proposed Station	Proposed Zone	Fare Structure		
		One Way	12 Ride	Monthly Pass
Ashland	6	$3.50	$35.00	$112.00
Southborough	6	3.50	35.00	112.00
Westborough	8	4.00	40.00	128.00
Grafton	8	4.00	40.00	128.00
Worcester	9	4.75	47.50	136.00

Under the provisions of the MEPA Certificate issued for the November 1993 Notice of Project Change, Interim Service to Worcester began on September 26, 1994. This service provides three trains each in both the A.M. and P.M. peak commuting hours traveling express between Worcester and Framingham. Approximate train departure and arrival times and station stops between Framingham and South Station are shown in Tables 3.2-2 and 3.2-3. The Interim Service schedule does not accommodate reverse commuting and there is no weekend service.

By mid-1997, with the Grafton station in operation, the train schedule will be increased to provide the proposed Basic Service consisting of 10 operations in each direction per day. There will be four trains inbound to Boston during the A.M. commuting hours and five trains departing South Station during the P.M. peak hours. The approximate train schedules shown in Tables 3.2-4 and 3.2-5 and assume that all of the intermediate stations are constructed. In fact, only the Grafton Station will be on line by mid-1997. Minor schedule adjustments will be necessary to allow for less total running time between Worcester and Framingham without stations in Westborough, Southborough, and Ashland. Assuming that the current Framingham arrival and departure times are maintained, minor adjustments would be made to the Worcester arrival and departure times. The schedules have been adjusted since the DEIR to eliminate excessive turn-around time at Worcester during the off-peak hours.

Table 3.2-2 Interim Service - Worcester Commuter Rail Eastbound MBTA Trains Worcester to South Station

TRAIN	START TIME	ARRIVAL TIME	WORCESTER	GRAFTON	WESTBOROUGH	SOUTHBOROUGH	ASHLAND	FRAMINGHAM	WNATICK	NATICK	WELLSQUARE	WELLHILLS	WELLFARMS	AUBURNDALE	WNEWTON	NEWTONVILLE	BACKBAY	SOUTHSTATION
500	05:45 A.M.	07:02 A.M.	O					S	S	S	S	S	S	S	S	S	S	D
502	06:20 A.M.	07:25 A.M.	O					S	S								S	D
510	07:15 A.M.	08:20 A.M.	O					S	S								S	D

O = ORIGIN D= DESTINATION S= STOP

Table 3.2-3 Interim Service - Worcester Commuter Rail Westbound MBTA Trains South Station to Worcester

TRAIN	START TIME	ARRIVAL TIME	WORCESTER	GRAFTON	WESTBOROUGH	SOUTHBOROUGH	ASHLAND	FRAMINGHAM	W NATICK	NATICK	WELL SQUARE	WELL HILLS	WELL FARMS	AUBURNDALE	W NEWTON	NEWTONVILLE	BACK BAY	SOUTH STATION
517	04:55 P.M.	06:00 P.M.	D					S	S								S	O
521	05:30 P.M.	06:49 P.M.	D					S	S	S	S	S	S	S	S	S	S	O
523	06:00 P.M.	07:05 P.M.	D					S	S								S	O

O = ORIGIN D= DESTINATION S= STOP

Table 3.2-4 Basic Service - Worcester Commuter Rail Eastbound MBTA Trains Worcester to South Station

TRAIN	START TIME	ARRIVAL TIME	WORCESTER	GRAFTON	WESTBOROUGH	SOUTHBOROUGH	ASHLAND	FRAMINGHAM	WNATICK	NATICK	WELLSQUARE	WELLHILLS	WELLFARMS	AUBURNDALE	WNEWTON	NEWTONVILLE	BACK BAY	SOUTH STATION
502A	06:00 A.M.	07:10 A.M.	O	S	S	S	S	S									S	D
504A	06:50 A.M.	08:00 A.M.	O	S	S	S	S	S									S	D
506	07:20 A.M.	08:40 A.M.	O					S	S	S	S	S	S	S	S	S	S	D
506A	07:40 A.M.	08:50 A.M.	O	S	S	S	S	S									S	D
510	08:10 A.M.	09:20 A.M.	O	S	S	S	S	S									S	D
514	11:30 AM	01:00 P.M.	O	S	S	S	S	S	S	S	S	S	S	S	S	S	S	D
518	03:05 P.M.	04:35 P.M.	O	S	S	S	S	S	S	S	S	S	S	S	S	S	S	D
520A	05:45 P.M.	07:05 P.M.	O	S	S	S	S	S	S	S	S	S	S				S	D
526	07:40 P.M.	08:50 P.M.	O	S	S	S	S	S									S	D
530	09:50 P.M.	11:20 P.M.	O	S	S	S	S	S	S	S	S	S	S	S	S	S	S	D

O = ORIGIN D= DESTINATION S= STOP

Table 3.2-5 Basic Service - Worcester Commuter Rail Westbound MBTA Trains South Station to Worcester

TRAIN	START TIME	ARRIVAL TIME	WORCESTER	GRAFTON	WESTBOROUGH	SOUTHBOROUGH	ASHLAND	FRAMINGHAM	WNATICK	NATICK	WELLSQUARE	WELLHILLS	WELLFARMS	AUBURNDALE	WNEWTON	NEWTONVILLE	BACKBAY	SOUTHSTATION
505	06:30 A.M.	07:50 A.M.	D	S	S	S	S	S	S	S	S	S					S	O
509	09:45 A.M.	11:10 A.M.	D	S	S	S	S	S	S	S	S	S	S				S	O
513	1:15 P.M.	02:45 P.M.	D	S	S	S	S	S	S	S	S	S	S	S	S	S	S	O
515A	04:25 P.M.	05:35 P.M.	D	S	S	S	S	S									S	O
519	04:40 P.M.	05:50 P.M.	D	S	S	S	S	S									S	O
521	05:25 P.M.	06:35 P.M.	D	S	S	S	S	S									S	O
521A	06:10 P.M.	07:20 P.M.	D	S	S	S	S	S									S	O
523	06:20 P.M.	07:50 P.M.	D	S	S	S	S	S	S	S	S	S	S	S	S	S	S	O
527	08:10 P.M.	09:40 P.M.	D	S	S	S	S	S	S	S	S	S	S	S	S	S	S	O
531	11:00 P.M.	12:30 A.M.	D	S	S	S	S	S	S	S	S	S	S	S	S	S	S	O

O = ORIGIN D= DESTINATION S= STOP

The proposed Basic Service will include four A.M. peak hour trains making all stops between Worcester and Framingham, then express to Boston. The other six inbound trains also will make all stops between Worcester and Framingham (except one that is express to Framingham) and continue to Boston as part of the current Framingham to Boston scheduled service. The balance of the scheduled 15 trains from Framingham to Boston will be unaffected except for possible minor schedule adjustments.

Trains from Boston to Worcester will include four P.M. peak hour trains running express to Framingham, then making all stops between Framingham and Worcester. The other six outbound trains from Boston will make the regular Framingham line stops, then continue to Worcester making all station stops. The balance of the scheduled 16 trains from Boston to Framingham will be unaffected except for possible minor schedule adjustments.

Complete commuter train schedules between Worcester and Boston, including departure times at all station stops, are not included at this time for several reasons. Schedule adjustments are commonly made about twice each year. Although a reduction or an increase in the number of commuter trains would play a primary role in schedule adjustments, it is more likely that other factors would influence an adjustment. For example, activity at South Station, changes in the numbers or timing of Conrail freight runs, or changes in Amtrak service could affect commuter train schedules.

As an expansion of the Interim Service Schedule, Basic Service does not provide a true reverse commute schedule, nor does it provide for weekend service. Data available from other MBTA commuter lines reveal that reverse commute demand is quite small, usually 2% or less of the total ridership. If employment opportunities are concentrated in the vicinity of the outlying terminus of a commuter line, then reverse commute might be appropriate. At present, employment concentration in Worcester does not fit the basic concentration requirement since many of the jobs are accessed from I-290. If the picture were to change, the MBTA would entertain a further evaluation and possible institution of a reverse commute schedule. As for weekend service, the MBTA has received many requests for weekend rail service between Worcester and Boston. Presently, the MBTA's Railroad Operations Section is working with the Planning Department to develop a schedule for Saturdays and Sundays. It is anticipated that such a service will be an extension of the Framingham-Boston weekend service, providing about half the number of weekday trains and carrying about 25% of the weekday patrons. Service between Boston and Worcester could commence as early as January 1997. The service related impacts, although not quantifiable at this time, will involve impacts to local traffic and noise and vibration impacts along the right-of-way. These impacts will be less than the worst case traffic and noise/vibration impacts for weekday commuter service. Positive

effects on regional traffic and on air quality will result from the institution of weekend rail service to Worcester.

3.3 Commuter Rail Ridership

In response to comments on the November 1994 Draft EIR, and as input to the Regional Station Feasibility Study, the Central Transportation Planning Staff (CTPS) performed additional ridership analyses for the Worcester Commuter Rail Extension project. The travel demand forecasting procedures are the same as employed for the Draft EIR.

The analyses, contained in Appendix D of the March 1996 Final EIR, address ridership projections for a variety of scenarios with and without a Regional Station for years 1996, 2001, 2006 and 2011. Different from previous ridership presentations is the inclusion of the Framingham Station ridership.

In terms of the proposed project, which includes a Worcester station and 4 intermediate stations, the ridership projections are the same generally as previously presented except for the inclusion of Framingham Station. The elimination of a Millbury Station has no effect on total ridership. See Table 3.3-1. Since this Final EIR addresses the short-term situation with a Grafton Station only, the ridership projections for the year 1996 for that scenario are shown in Table 3.3-2.

Table 3.3-1 Ridership Projections With All Intermediate Stations*

Estimated Daily Inbound Commuter Rail Trips to Boston CBD and East Cambridge

Year	Worcester	Grafton	Westborough	Southborough	Ashland	Framingham
1996	385	248	221	507	770	709
2001	414	266	235	511	856	742
2006	442	293	251	513	973	814
2011	472	321	267	516	1085	881

* *Southborough constrained at 420 parking spaces; Worcester and Grafton ridership adjusted due to elimination of Millbury Station.*

Table 3.3-2 Ridership Projections With Grafton Only

Estimated Daily Inbound Commuter Rail Trips to Boston CBD and East Cambridge

Year	Worcester	Grafton	Westborough	Southborough	Ashland	Framingham
1996	425	446	----	----	----	1363

Parking demand for the ridership projected in Table 3.3-1 is shown on Table 3.3-3. The interaction between Ashland and Framingham will require future monitoring after all local stations are in place. Phase 2 of the Framingham Terminal Development project would add up to 350 new parking spaces at the Framingham Station, if necessary.

Parking demand for the ridership projected in Table 3.3-2 is shown in Table 3.3-4. Because Grafton Station will have only 265 parking spaces, approximately 100 patrons could be lost in the short term. It is expected that Kiss'n'Ride patrons will increase for the short term. This demand will be short-term, as additional local stations are anticipated during 1997. Total ridership projections, with and without the Framingham Station, are shown in Table 3.3-5.

Table 3.3-3 Parking Demand With All Intermediate Stations

Year	Worcester	Grafton	Westborough	Southborough	Ashland	Framingham
1996	300	200	180	420	610	360
2001	320	220	190	420	690	370
2006	350	240	210	420	780	430
2011	370	260	220	420	870	480

Table 3.3-4 Parking Demand With Grafton Only

Year	Worcester	Grafton	Westborough	Southborough	Ashland	Framingham
1996	310	370	---	---	---	690

Table 3.3-5 Ridership Totals - Worcester to Boston

Year	Without Framingham	With Framingham
1996	2,130	2,839
2001	2,283	3,024
2006	2,473	3,287
2011	2,659	3,540

"Without Framingham" is total daily boardings at Worcester and the four proposed new intermediate station. "With Framingham" totals adds the additional boardings at the Framingham station.

3.4 Effects on Existing Rail Service

Prior to the introduction of commuter rail Interim Service from Worcester in the Fall of 1994, Conrail freight and Amtrak intercity passenger trains ran on the tracks between Boston and Worcester and beyond. The three rail services now coexist in the corridor.

Between Boston and Framingham, the trains run on tracks owned by the MBTA. From Framingham to Worcester and beyond the tracks are owned and maintained by Conrail. Most of the existing mainline between Boston and Worcester is currently double tracked with continuous welded rail. The seven mile section between milepost (MP) 33.2 in Westborough and MP 40.3 in Worcester is single tracked. The eastbound track in this section was removed by Conrail in 1985. The second track is being restored as part of this project to accommodate safe, efficient operation of the three train services. In fact, even with Amtrak service reduced to one round trip daily, the second track is necessary for the increase in commuter trains from the Interim Service three round trips daily to the Basic Service 10 round trips daily. In addition, the eastbound track between MP 40.3 and MP 44.4, currently used by Conrail for a siding, is being upgraded, including new welded rail, as part of this project.

It was reported in the DEIR that, due to the introduction of Interim Service from Worcester, existing scheduled Framingham trains immediately before or after Interim Service express trains (2 of the 3 new trains would run express between Framingham and Boston) could lose some patronage to the express trains. No significant increase in boardings at the Framingham Station was anticipated. But, with daily boardings at Framingham in the order of 950 to 1,000 riders before Interim Service began, a significant increase to around 1,350 to 1,400 was observed in late 1994 and early 1995.

The majority of the increased ridership has resulted from the introduction of express commuter service to Boston.

When the Basic Service commuter schedule is introduced in mid-1997, two additional A.M. express trains will be offered departing from Framingham Station at 7:40 A.M. and 8:10 A.M. Once again, it is anticipated that a shift in ridership from non-express trains to express trains could result, but no significant increase in total ridership should occur. In addition, minor adjustments will be made to the Basic Service Schedule (See Tables 3.2-4 and 3.2-5) to account for less total running time without stations (for the short term) at Westborough, Southborough, and Ashland. The adjustments are likely at the Worcester Interim Station, thus maintaining the Framingham schedule.

SECTION 4.0 IMPACTS OF SERVICE

Introduction

By mid-1997, the Worcester Extension Basic Service will provide 10 round trips daily between Worcester and Boston (See Section 3.2). Since only the Grafton station will be in service (Westborough, Southborough, and Ashland local stations anticipated to be built by the end of 1997), certain effects will be temporary as opposed to the effects of full implementation of the proposed project. Regional air quality will benefit, but to a lesser degree than for full project implementation. Noise and vibration will be different for the short term without stations in Westborough, Southborough, and Ashland. Gate closings at grade crossings in Grafton, Ashland, and Framingham will result in traffic impacts from Basic Service commuter train operations. The number of gate closings will be the same regardless of which commuter stations are in operation. An update of historic and archaeological resources is included in this section. Appropriate mitigation measures were presented in the March 1996 FEIR.

4.1 Regional Air Quality

The regional air quality study conducted to evaluate the impact of the proposed Worcester Commuter Rail Extension Project consists of three analyses which quantify the various components of air quality impacts. These analyses look at the effects the commuter rail extension would have on overall air quality and compare them to a present and future without the commuter rail extension. The individual air quality analyses are as follows:

- Impacts of Auto Trip Diversion to Commuter Rail
- Impacts of Auto Trip Diversion on Peak Hour Massachusetts Turnpike Operations
- Impacts of Commuter Rail Operations

The combined effects of these three components of the air quality analysis represent the net estimated air quality impact of the various alternatives. The alternatives analyzed were as follows:

- No Build 1996;
- No Build 2001;
- Build 1996 Millbury and Grafton Stations Only (and Worcester);
- Build 1996 All Stations;
- Build 2001 All Stations.

The recent elimination of the Millbury Station (See Section 2.2) calls for an adjustment of the 'Build 1996 Millbury and Grafton Stations Only' scenario. The alternative now becomes 'Build 1996 Grafton Station Only.' The Millbury Station ridership from the communities of Oxford, Charlton, Millbury, Auburn and Worcester is diverted to the Worcester Station (11%) and the Grafton Station (89%). The specifics of the analyses were presented in the March 1996 Final FEIR.

Summary of Regional Air Quality Impacts

The regional air quality analysis combines the results of the three individual analyses and shows that there is a calculated net reduction in VOC, NOx, and CO emissions due to operation of the Worcester Commuter Rail Extension. The net reductions are based on the cumulative impacts of: Impacts of Auto Trip Diversion to Commuter Rail; Impacts of Auto Trip Diversion on Peak Hour Massachusetts Turnpike Operations; and Impacts of Commuter Rail Operations. The greatest reduction in emissions occurs under the 1996 Build All Stations scenario as follows:

- Net reduction in VOC of 133 kilograms per day.
- Net reduction in NOx of 106 kilograms per day.
- Net reduction in CO of 1,384 kilograms per day.

Table 4.1-1 presents the summary of the three analyses as well as the regional calculated net air quality benefit.

Table 4.1-1 Regional Calculated Net Daily Benefit of Commuter Rail Operations (Kilograms/day)

	VOC (Kg.)	NO_x (Kg.)	CO (Kg.)
Impacts of Reduced Vehicle-Miles Traveled Resulting from Auto Trip Diversion			
1996 Millbury and Grafton Only (and Worcester)	66	96	662
1996 All Stations	122	193	1,214
2001 All Stations	69	158	718
Impacts of Reduced Traffic Volumes During Peak Hour Massachusetts Turnpike Operations			
1996 Millbury and Grafton Only (and Worcester)	12	(5)	149
1996 All Stations	15	(10)	181
2001 All Stations	16	(8)	294
Impacts of Locomotive Operations			
1996 Millbury and Grafton Only (and Worcester)	(4)	(77)	(11)
1996 All Stations	(4)	(77)	(11)
2001 All Stations	(4)	(77)	(11)
Total Net Daily Benefits			
1996 Millbury and Grafton Only (and Worcester)	74	14	800
1996 All Stations	133	106	1,384
2001 All Stations	81	73	1,001

The elimination of the Millbury Station results in a shift of ridership to the Worcester and Grafton stations. The trip lengths from the town centers of the communities which would have been served by the Millbury Station (Oxford, Charlton, Millbury, Auburn and Worcester) increase as the riders would now travel to either Worcester (11%) or Grafton (89%). The following summarizes the net effect on the positive impacts presented in Table 4.1-1.

- The Millbury Station ridership (149) accounted for only 7% of the total demand of the Worcester, Millbury, Grafton, Westborough, Southborough and Ashland Stations.

- The shift of riders to Worcester Station and Grafton Station results in an increase of 22.5% and 21.9% in 1996 and 2001 respectively of the daily vehicle miles traveled (VMT) from the affected communities.
- The diversion of riders creates an additional 595 and 638 daily VMT in 1996 and 2001 respectively, resulting in an increase in project total Town Center to Station VMT of 3.8% in 1996, (from 15,744 to 16,339 and in 2001, from 16,954 to 17,592).
- The Town Center to Boston daily VMT remains unchanged at 116,289 and 124,360 in 1996 and 2001 respectively.
- The net reduction in daily VMT changes from 100,545 to 99,950 in 1996 and from 107,406 to 106,768 in 2001. This represents a 0.6% decrease.

Although the small increase in Town Center to Station daily VMT would result in marginally higher emissions, there is still a significant net benefit created by project implementation.

Reductions in emissions result from the impacts of reduced VMT caused by auto trip diversion and the impacts of reduced traffic volumes on the Turnpike during peak hour operations caused by auto trip diversion. The locomotive emissions represent additional or new emissions caused by the operation of the commuter rail extension.

Table 4.1-1 presents the combined emission reductions of auto trip diversions and increased Turnpike speed, with total net reductions due to the commuter rail extension. Net CO emissions are greatly influenced by auto trip diversions and improved Turnpike operations, with only minor offsetting emissions due to train operations. The State Implementation Plan (SIP) for the attainment of National Ambient Air Quality Standards (NAAQS) targets CO emissions as "hot spots" on the microscale level and reductions in VOC emissions between now and the end of 1996. Though Massachusetts attained the NAAQS for CO in 1996, controlling CO emissions is still required during the maintenance phase of CO attainment. After 1996, the SIP focuses on the reductions in both VOC and Nox. Table 4.1-1 reflects net reductions in both of these pollutants.

The combination of VOC and NOx by photochemical oxidation (in the presence of heat and sunlight) forms ozone (O_3). The oxidation process occurs over a period of time at a metropolitan or regional scale and is also a function of the transport of the pollutants over potentially long distances and long periods of time. All of Massachusetts, including the study region is classified as "serious" non-attainment status for O_3 under the Clean Air Act Amendments of 1990. Ozone attainment is required by 1999.

The reaction of VOC and NOx to form ozone is a complex process which is being studied by the EPA and the Massachusetts DEP. The current baseline inventory reveals

that VOCs and NOx exist in the atmosphere in approximately equal proportions, although the relationship between the two pollutants in the formation of ozone is difficult to quantify. The sum of the VOC and NOx emissions in Table 4.1-1 indicate that a total net reduction in both pollutants would occur as a result of the commuter rail extension.

4.2 Noise and Vibration

The March 1996 FEIR on Millbury Station, Grafton Station, and Railroad Operations presented updated analyses of noise and vibration effects along the rail corridor for Basic Service to all stations as well as interim effects of service to Millbury and Grafton stations only.

Since the publication of that FEIR, the MBTA has determined that Millbury Station will not be implemented as part of the current project. Train operations will be altered by elimination of stops at Millbury, resulting in higher speeds through the Millbury Station area. Review of existing land use indicates that no additional noise or vibration impacts will occur as a result of eliminating the Millbury Station stop from the current project.

4.3 Railroad At-Grade Crossings/Traffic

There are five (5) roadway grade crossings of the railroad between Worcester and Framingham. The crossings are located as follows:

- in Grafton at Parmenter Crossing
- in Ashland at Main Street and at Cherry Street
- in Framingham at Concord Street (Route 126) and at Bishop Street

Current train operations between Worcester and Framingham include 10 Conrail freights, 2 Amtrak intercity passenger trains and 10 MBTA commuter rail trains. Although schedules are subject to change, and unscheduled freight runs are likely, at least 22 daily trains pass through Grafton and Ashland. In Framingham, the daily trains are more numerous due to the Framingham-Boston commuter operations plus more unscheduled Conrail freights maneuvering in and out of the Framingham yard area. The Framingham train crossings and associated gate closings are addressed in Section 8.0 of the March 1996 FEIR.

MBTA Basic Service commuter trains will total 10 round trips as compared to the present Interim Service 3 round trips per day. Thus, 14 additional trains will increase the present train runs through Grafton and Ashland from 18 daily to 32 daily.

Parmenter Crossing in Grafton is located about ¾ miles west of Pine Street and runs about 150 feet north of Route 30 (Westborough Road) to the tracks (see Figure 3.0-1, Panel 4 of 9). The road provides access to one residential property north of the tracks and is the only means of access/egress. The tracks are elevated compared to the surrounding lands and protected by a system of warning lights and bells. Traffic is minimal, likely to be only several vehicles daily. The addition of Basic Service commuter trains will not result in any significant adverse effect on traffic. As part of restoration of the eastbound track, the grade crossing protection is being upgraded to ensure proper operation for a two track system.

In Ashland, grade crossings at Main Street and at Cherry Street are protected by gates, warning lights and bells (see Figure 3.0-1, Panel 8 of 9). Located respectively, in and near the downtown section of Ashland, these crossings are used heavily, particularly the Main Street crossing. Town officials have expressed concerns regarding the safety aspects of the grade crossings, not only due to former operational problems with the gates and signals, but also due to the general geometric and operational characteristics of the adjacent intersections. The Conrail owned and maintained gate system has been repaired and upgraded and now is considered to be in good operating condition.

Evaluation of significant improvements to the roadways has not resulted in any viable solution to present or future traffic concerns. Basic considerations included a grade separation of the railroad/roadway grade crossing at Main Street (which would also necessitate a grade separation at Cherry Street, which is located only about 600 feet west of Main Street) and/or the addition of more travel lanes to improve the flow of traffic. A grade separation would have to be accomplished completely by a lowering of the tracks since elevating the roadway is not practical. Lowering the tracks, which would require depressing the tracks by at least 23 feet in downtown Ashland, would result in a project length of about 2 miles with literally miles of retaining walls and a prohibitive price tag. Maintaining railroad operations within the right-of-way during the track lowering construction activities would either be another prohibitive cost or an impossibility.

Roadway improvements, specifically the addition of travel and turning lanes, would require land takings and the removal of numerous buildings in downtown Ashland. This option, although quite likely a workable solution in terms of adequately reducing traffic delays, is clearly unacceptable politically and practically.

In Ashland, the analysis of signalized intersections presented in the November 1994 DEIR included intersection approach capacities that were decreased for most approaches for

the intersections of Main Street with Front Street and Main Street with Summer Street/Homer Avenue to account for the effects of the at-grade railroad crossing adjacent to these intersections. Although only 3 or 4 of the 20 commuter trains will be during morning or afternoon peak hour traffic conditions, the periodic gate closings effectively reduce intersection capacity proportional to the duration of the closing. The gate closings, which vary in duration depending on train speed, are for approximately one minute. As presented in the DEIR, intersection level of service (LOS) for the Build vs. the No-Build Scenario for the Basic Service train schedule in the A.M. peak hour and peak generator hour improves somewhat for the Main/Front, Main/Union and Union/Summer intersections. The improvement in LOS is obtained by optimizing signal timings. The Main/Summer intersection shows a slight reduction in the peak generator hour. For the P.M. peak generator hour, the Main/Union intersection is predicted to have a degradation in LOS.

Upon completion of a commuter rail station in Ashland, many commuters will shift their travel mode from automobiles to commuter trains. Approximately the same number of vehicle trips will be made in the study area, but the trips to the rail station, with parking both north and south of the tracks, will result in fewer vehicles passing through the Main Street grade crossing. The ratio of commuter parking spaces is proposed to conform to the 70% of projected riders from south of the tracks and the 30% from north of the tracks. The vehicles which currently bypass the proposed station parking and continue through downtown Ashland, either from the north or the south, were not deducted from future traffic volumes. This situation resulted in a "worst case" traffic analysis.

The gate closings have been factored into the traffic analysis. But, as cited above, reduced traffic volumes due to the operation of an Ashland commuter station have not been deducted. Following the selection of the Ashland Station location, including the number of parking spaces north and south of the tracks, traffic operations at key intersections, including the grade crossing at Main Street, have been monitored. Mitigation measures have been evaluated and discussed with appropriate Town officials. (For discussion of these issues, see Section 7.0, Ashland Station.)

4.4 Archaeology and Historical

Archaeology - Summary

In accordance with the Memorandum of Agreement between the MBTA and the MHC, consultation to avoid, minimize, or mitigate impacts to any significant archaeological resources will be performed. The complete report on the Westborough, Southborough and Ashland Stations is in progress and will be submitted to the MHC as Volume IV.

Archaeology-Railroad R-O-W

The archaeology investigation for the entire railroad right-of-way has been completed and submitted to the Massachusetts Historical Commission (MHC). A follow up investigation of limited areas within the right-of-way where cuts and fills or right-of-way fencing were required resulted in a recommendation for no further archaeological testing. The MHC concurred with this recommendation and concluded that no significant historic or prehistoric resources were recovered from the railroad right-of-way. The report, Volume 1-Archaeological Intensive Survey of the Railroad Right-of-Way, is available for review at the MBTA Environmental Management Unit, 10 Park Plaza, Boston, MA.

Archaeology-Millbury and Grafton Stations

The archaeological intensive survey for the Millbury and Grafton Station sites was completed and submitted to the MHC in a report entitled Volume III - Archaeological Intensive Survey for Millbury and Grafton Stations. The MHC concurred with the findings that no significant historic or prehistoric resources were recovered from either station site. The report is available for review at the MBTA Environmental Management Unit, 10 Park Plaza, Boston, MA.

Archaeology - Westborough Station

As reported in section 5.7 of this document, no significant historic or prehistoric resources were recovered from the Westborough Station site.

Archaeology - Southborough Station

As reported in section 6.7 of this document, the historic research and site inspection has been completed; the site evaluation process is in progress in accordance with the permit issued by the MHC.

Archaeology - Ashland Station

As reported in section 7.7 of this document, the intensive archaeological survey for the Ashland Station site recovered no significant historic or prehistoric resources.

Historic Properties

The historic properties identified in the November 1994 DEIR were reported in Section 7.8, Cultural Resources. Historic information was presented also under each proposed station section of the DEIR. More information was presented in the July 1995 FEIR and the March 1996 FEIR. An expanded, more detailed study was performed and submitted

to the MHC as Volume II - Historic Properties Survey for the Right-of-Way of the Worcester Commuter Rail Extension. The MHC has reviewed the report and concurrence has been reached on the identification of historic assets, particularly those eligible for inclusion on the National Register of Historic Places. Overall, the potential effects of the proposed project, whether along the right-of-way or at specific station sites, are visual in nature. The presentation of Historic Properties/Sites for the Westborough, Southborough, and Ashland Stations are in Sections 5.6, 6.6, and 7.6, respectively, of this document.

SECTION 5.0 ENVIRONMENTAL IMPACTS—WESTBOROUGH STATION

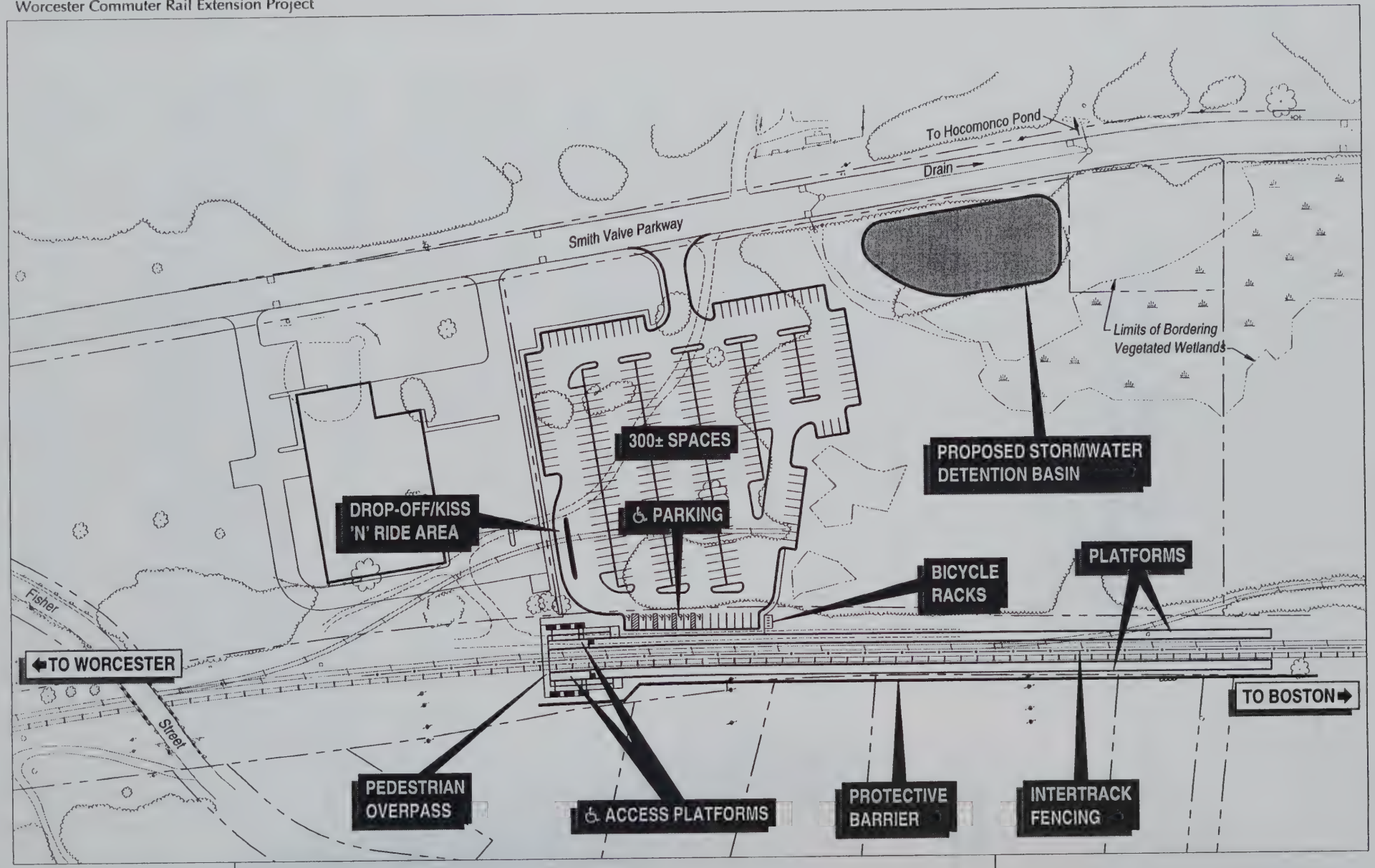
Introduction

The proposed commuter rail station in Westborough will be constructed on Smith Valve Parkway, west of Otis Street, and on the north side of the railroad tracks. In addition to the standard station amenities cited in Section 2.1, parking will be provided for 300 vehicles. The site plan is shown on Figure 5.0-1.

The November 1994 Draft EIR covering the entire Worcester Commuter Rail Extension project, the July 1995 Final EIR covering the Railroad Right-of-Way and Layover Facility, and the March 1996 Final EIR covering Millbury Station, Grafton Station, and Railroad Operations, all presented traffic-related analyses and impacts for the years 1996 and 2001. Due to a variety of reasons, station construction and operation will not be achieved prior to the end of 1996. The current schedule calls for Grafton Station to be completed in fall of 1997, followed by Westborough, Southborough, and Ashland Stations by the end of 1997. To update all previous analyses to the years 1997 and 2002 would entail a major work effort which would not result in any discernible change in impacts. The difference in the traffic-related impacts would be due only to a 1.5% (conservative) increase in background traffic for 1997 versus 1996. The following local traffic presentation for the Westborough Station retains the 1996 and 2001 analysis years from the Draft EIR. Other references to the above years have been retained for the sake of consistency.

The Westborough station is projected to attract 221 patrons in 1996, with daily ridership increasing to 267 by the year 2001.

The streets and intersections within the Westborough study area operate at acceptable levels of service under the "No Build" and "Build" conditions for both year 1996 and year 2001 scenarios. Some minor reduction in level of service is expected for Smith Valve Parkway traffic turning onto Otis Street and Mill Road traffic turning onto Fisher Street. However, the intersections will function acceptably during all peak periods.



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 150'
0 150'

SITE PLAN
WESTBOROUGH STATION

FIGURE 5.0-1

The signalized intersection of Route 9 and Otis Street showed signs of declining operating LOS on some approaches in the existing condition. It is expected that this will continue with or without the proposed rail station due to normal background traffic growth. To alleviate this situation, the Massachusetts Highway Department has performed improvements to increase capacity on Route 9. With the proposed improvements in place, the intersection will function at acceptable levels of service in both the "No Build" and "Build" conditions.

Three residences on Fisher Street south of the station site will be subject to temporary construction noise impact.

The proposed station site stormdrain system will mitigate increases in peak runoff rates by construction of an on-site detention basin, which will discharge into the existing closed drainage systems on Smith Valve Parkway. The parking lot will be within the 100 foot wetland buffer zone, but no wetland resources will be displaced. Final design elements will be coordinated with the Westborough Conservation Commission through filing of a Notice of Intent.

The Hocomonco Pond Superfund Site is located one-eighth mile from the station site. The environmental evaluation of the station area produced no evidence that contaminants from the Hocomonco Pond site have impacted soils or groundwater at the commuter rail station site.

5.1 Local Traffic

This section provides a summary of the complete traffic analysis included in the November 1994 DEIR Appendix-Volume I. This section summarizes existing traffic conditions in Westborough, projected ridership for the Westborough Station, and the impact of that ridership on area streets and intersections.

Ridership projections for each proposed station were prepared by the Central Transportation Planning Staff (CTPS) in May 1994, and form the basis for traffic impact analyses used in the November 1994 DEIR. Ridership projections were updated by CTPS in January 1996. For Westborough Station, the updated ridership increased slightly, to 221 patrons, with minor adjustments in town of origin. When ridership is distributed to the trip network and traffic hours of concern, the net effect on level of service analyses performed for the Draft EIR is negligible.

The traffic analysis prepared for the Westborough Station focused on the streets and intersections in the ENF Certificate of the Secretary of Environmental Affairs. Figures 5.1-1 (A.M. Peak Hour) and 5.1-2 (P.M. Peak Hour) show the location of the streets and intersections that were analyzed as part of the study.

Analysis of the streets and intersections was performed for the existing conditions and the "No Build" and "Build" conditions for the years 1996 and 2001. A level of service (LOS) was calculated for each street segment and intersection. A discussion of the LOS rating system was presented in Section 1.3 of the November 1994 DEIR. A summary of the LOS designations is as follows:

Rating	Judgment
A	Little or no delay
B	Short traffic delays
C	Average traffic delays
D	Longer than average delays
E	Very long traffic delays
F	Severe congestion, demand exceeds capacity

The results of the LOS analysis are presented for the A.M. and P.M. peak hours as well as the A.M. and P.M. peak generator hours. The A.M. and P.M. peak hours are those periods when traffic conditions are heaviest. The A.M. and P.M. peak generator hours are those periods when usage of the rail station is heaviest. Traffic count data showed that the A.M. and P.M. peak hours in Westborough are from 7:30 to 8:30 A.M. and 4:45 to 5:45 P.M., respectively. The A.M. and P.M. peak generator hours are from 7:00 to 8:00 A.M. and 5:45 to 6:45 P.M., respectively.

Existing Conditions

Existing conditions were determined by traffic counts and intersection turning movement counts conducted in the Fall of 1992 and the Spring of 1993 and 1994. The results of the counts were used to calculate existing condition levels of service for each of the intersections and street segments studied. Figures 5.1-1 and 5.1-2 show existing A.M. and P.M. peak hour volumes within the study area. Figure 5.1-3 shows existing Average Daily Traffic (ADT) and Average Weekday Traffic (AWDT) for roads within the study area.

Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2250'
0 2250

AM Peak Hour
7:30 - 8:30 A.M.
1992 Existing Conditions
WESTBOROUGH STATION

FIGURE 5.1-1

Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2250'
0 2250

PM Peak Hour
4:45 - 5:45 P.M.
1992 Existing Conditions
WESTBOROUGH STATION
FIGURE 5.1-2

Table 5.1-1 and 5.1.2 present the results of the LOS analysis for the signalized and unsignalized intersections, respectively. Table 5.1-3 shows the results of the road segment analysis.

As the tables indicate, both the signalized intersection at Route 9 and Otis Street and all the unsignalized intersections operate at acceptable levels of service in both the peak hours and the peak generator hours.

A review of Table 5.1-3 shows that all the analyzed road segments function at acceptable levels of service in both the peak hours and peak generator hours.

Table 5.1-1 1992 Existing Signalized Intersection Level of Service

Westborough	Peak Hour		Peak Generator Hour	
	A.M.	P.M.	A.M.	P.M.
Route 9 and Otis	C	C	C	C
Eastbound	C	B	C	B
Westbound	B	C	B	B
Northbound	D	D	D	D
Southbound	E	D	D	D

Table 5.1-2 1992 Existing Unsignalized Intersection Level of Service

Westborough	Peak Hour		Peak Generator Hour	
	A.M.	P.M.	A.M.	P.M.
Fisher and Gleason				
LT from EB Fisher	A	A	A	A
LT and RT from Gleason	A	A	A	A
Otis and Smith Valve				
LT from NB Otis	A	A	A	A
LT and RT from Smith Valve	B	C	A	A
Fisher and Mill				
LT from WB Fisher	A	A	A	A
LT and RT from Mill	A	B	A	B
Fisher and Maynard				
LT from EB Fisher	A	A	A	A
LT and RT from Maynard	A	A	A	A
Arch and Fisher				
LT from SB Arch	A	A	A	A
LT and RT from Fisher		A	A	A
Glen and Arch				
LT from EB Glen	A	A	A	A
LT and RT from Arch	A	A	A	A

Table 5.1-3 1992 Existing Road Segment Level of Service

Westborough	Peak Hour		Peak Generator Hour	
	A.M.	P.M.	A.M.	P.M.
Otis North of Smith Valve	C	C	C	C
Smith Valve West of Otis	B	B	B	B
Smith Valve West of Site	B	B	B	B

The Westborough Police Department was contacted on June 27, 1994 to determine the existence and location of any safety concerns or high accident history intersections. Chief Parker did not believe that any of intersections or roadways within the study area currently experience a high frequency of accidents. He did express general concern about the effect of increased traffic within the area.

Rail Ridership Projections

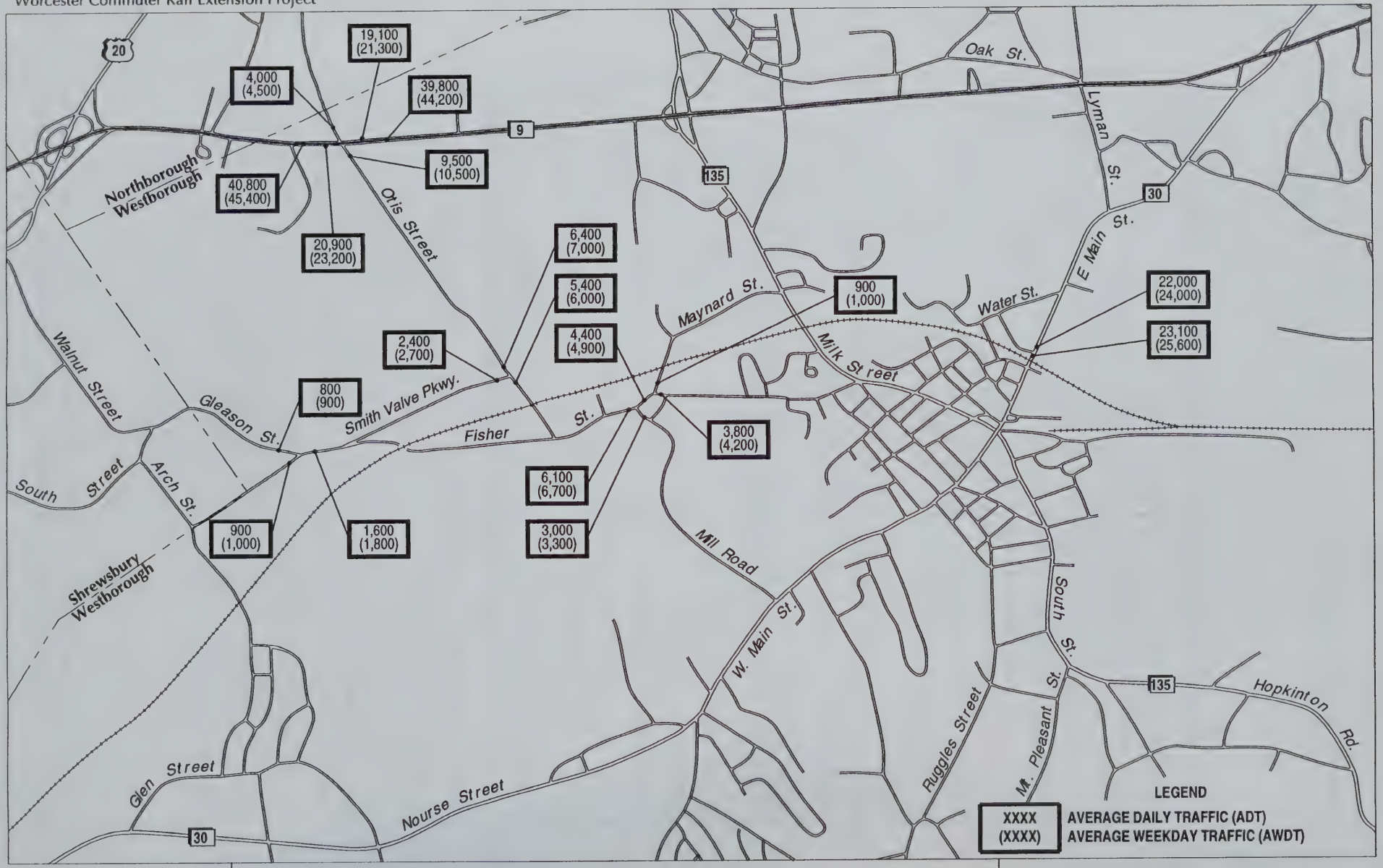
Projections of rail ridership at each of the proposed stations of the Worcester Extension Project were prepared by the Central Transportation Planning Staff (CTPS) in May, 1994. The projections were updated in January 1996 in response to comments on the Draft EIR and as input to the Regional Station Feasibility Study. The CTPS ridership projection memo is included in Appendix D of the March 1996 Final EIR. CTPS projected that the Westborough station would attract 221 daily round trip commuters in 1996. Eighteen patrons are expected to be dropped off at the station. The remaining 203 patrons would be Park'n'Ride patrons. Based on a vehicle occupancy rate of 1.12, the 203 Park'n'Ride patrons would result in a demand for 181 parking spaces.

The patrons of the Westborough Station are projected to originate from the towns of Westborough, Northborough, Upton and Shrewsbury. The table below shows the town of origin for the projected Westborough Station riders.

Table 5.1-4 Westborough Station Projected Ridership - Year 1996

Town of Origin	Riders
Westborough	42
Northborough	90
Upton	25
Shrewsbury	64
TOTAL	**221**

The impact of the commuter rail riders on area streets as they travel to the Westborough Station is determined by assigning those commuters to a particular route in the study area. Routing was selected based on the shortest travel time and/or distance from population centers. Riders who live in Westborough would utilize a variety of travel routes depending on the location of their residence. Riders from Northborough were assigned to Route 9 westbound to Otis Street. Riders from Upton were assigned to a route that includes Route 135, School Street, West Main Street, Mill Road and Fisher Street. Riders from Shrewsbury would use Route 9 eastbound to Otis Street and Route 20 to Walnut Street to Gleason Street. Figure 5.1-4 shows the projected distribution and percentage of station related traffic that would use Westborough area roadways.



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Approx. Scale: 1" = 2250'
0 2250

1992 Average Daily Traffic & 1992 Average Weekday Traffic
WESTBOROUGH, MA

FIGURE 5.1-3

Assignment of Riders to Trains

Commuter rail riders to a Westborough station would arrive at the station to catch one of four A.M. peak period trains and would leave the station based on the five scheduled P.M. peak period trains. The distribution of riders to each train was determined by use of an equation based on observed arrival and departure data from several MBTA commuter rail lines. The observations of distribution by trains tend to show the greatest number of riders on the trains that arrive at Boston close to 8:30 A.M. Trains arriving earlier and trains getting to Boston after 9:00 A.M. tend to attract fewer riders. In the evening peak, observations show the greater ridership in the middle of what is normally considered the peak commuting period.

1996 Traffic Impacts

The 1996 traffic impacts include background traffic growth, station generated traffic, and traffic generated by new development such as the Walmart at the northwest quadrant of the intersection of Route 9 and Otis Street. Background growth is usually determined by tracking historical growth rates of permanent count locations. During the 1980's, traffic grew at rates of 2 - 3% or more a year in many areas. For the 1990's, however, data from permanent count locations in the Westborough area showed mixed results including decreases in traffic volumes. As a conservative approach, 0.5% annual growth of traffic volumes was assumed from 1992 to 1996.

The traffic impacts of both a "No Build" and "Build" alternative were analyzed. The 1996 "No Build" alternative allows a comparison with the 1996 traffic impacts of "Build" conditions. The "Build" alternative did not assume any redistribution of existing traffic on local roads. In other words, the commuters driving to the rail station were considered to be new trips. In actuality, many of those who would drive to the station are already on the road. Their trip will be shortened by driving to the station. In some cases, they are already driving on the same roads to go to Route 9, for example, as they would to go to the new station. The "Build" analysis, therefore, does some double counting of vehicles and tends to be a worst case analysis.

Recently some changes to the study area roadway network occurred at the signalized intersection of Route 9 and Otis Street. The Massachusetts Highway Department (MHD) has completed improvements to increase capacity at the intersection. Currently, both Route 9 approaches to the intersection consist of three thru/general purpose lanes and one exclusive left turn lane. MHD extended the previously exclusive right turn lanes on both approaches and converted them to thru/general purpose lanes. In conjunction with these improvements, the eastbound and westbound left turn only lanes were also extended to provide additional storage. The southbound approach of Otis Street was widened to provide three lanes; the existing northbound Otis Street approach also provides three lanes. The "No Build" and "Build" traffic analyses were conducted utilizing the new geometry.

Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2250'

0 2250

Distribution of Commuter Rail Station Traffic
1996 BUILD ALL STATIONS
WESTBOROUGH STATION

FIGURE 5.1-4

The peak hour and peak generator hour overlap by 30 minutes in the A.M. period; there is no overlap in the P.M. peak period. Both the peak hour and peak generator hour were analyzed to determine the greatest impacts to the study area roadways.

Tables 5.1-5 through 5.1-8 present the results of the LOS analysis for the signalized and unsignalized intersections. The tables reflect both the "No Build" and "Build" condition.

Table 5.1-5 1996 Signalized Intersection Level of Service - A.M. Peak Hours

Westborough	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Route 9 and Otis	C	C	C	C
Eastbound	C	C	C	C
Westbound	C	C	B	C
Northbound	D	D	D	D
Southbound	D	D	D	D

Table 5.1-6 1996 Signalized Intersection Level of Service - P.M. Peak Hours

Westborough	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Route 9 and Otis	D	D	D	D
Eastbound	E	E	F	F
Westbound	C	C	C	C
Northbound	E	E	D	E
Southbound	D	D	D	D

Table 5.1-7 1996 Unsignalized Intersection Level of Service - A.M. Peak Hours

Westborough	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Fisher and Gleason				
LT from EB Fisher	A	A	A	A
LT from RT from Gleason	A	A	A	A
Smith Valve and Site's DW				
LT from WB Smith Valve	-	A	-	A
LT from Lot	-	A	-	A
RT from Lot	-	A	-	A
Otis and Smith Valve				
LT from NB Otis	A	A	A	A
LT and RT from Smith Valve	B	B	A	B
Fisher and Mill				
LT from WB Fisher	A	A	A	A
LT and RT from Mill	A	B	A	A
Fisher and Maynard				
LT from EB Fisher	A	A	A	A
LT and RT from Maynard	A	B	A	A
Arch and Fisher				
LT from SB Arch	A	A	A	A
LT and RT from Fisher	A	A	A	A
Glen and Arch				
LT from EB Glen	A	A	A	A
LT and RT from Arch	A	A	A	A

Table 5.1-8 1996 Unsignalized Intersection Level of Service - P.M. Peak Hours

Westborough	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Fisher and Gleason				
LT from EB Fisher	A	A	A	A
LT from RT from Gleason	A	A	A	A
Smith Valve and Site's DW				
LT from WB Smith Valve	-	A	-	A
LT from Lot	-	A	-	A
RT from Lot	-	A	-	A
Otis and Smith Valve				
LT from NB Otis	A	A	A	A
LT and RT from Smith Valve	C	C	A	B
Fisher and Mill				
LT from WB Fisher	A	A	A	A
LT and RT from Mill	B	B	B	B
Fisher and Maynard				
LT from EB Fisher	A	A	A	A
LT and RT from Maynard	B	B	A	A
Arch and Fisher				
LT from SB Arch	A	A	A	A
LT and RT from Fisher	A	A	A	A
Glen and Arch				
LT from EB Glen	A	A	A	A
LT and RT from Arch	A	A	A	A

Table 5.1-9 1996 Road Segment Level of Service - A.M. Peak Hours				
Westborough	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Otis North of Smith Valve	C	C	C	C
Smith Valve West of Otis	B	B	B	B
Smith Valve West of Site	B	B	B	B

Table 5.1-10 1996 Road Segment Level of Service - P.M. Peak Hours				
Westborough	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Otis North of Smith Valve	C	C	C	C
Smith Valve West of Otis	B	B	B	B
Smith Valve West of Site	B	B	B	B

As the tables indicate, both the signalized and unsignalized intersections will operate at acceptable levels of service under the "No Build" and the "Build" conditions. The traffic turning from Smith Valve Parkway to Otis Street will have some minor reduction in LOS in the "Build" condition, as will traffic turning from Mill Road to Fisher Street.

Three roadway segments were analyzed for LOS in the "No Build" and "Build" conditions. The results of the analysis are shown in Tables 5.1-9 and 5.1-10. As shown, the segments function acceptably in both the "No Build" and the "Build" conditions.

2001 Traffic Impacts

A LOS analysis was prepared for the Westborough study area intersections and road segments using year 2001 traffic volumes and ridership projections. Background traffic growth of 1.5% per year was assumed for the period 1996 to 2001. The proposed Fountainhead Plaza project, in the northwest quadrant of the Route 9/Otis Street intersection, was replaced by the recently constructed WalMart project. Traffic volumes have been revised to include trips generated by the new development.

CTPS projected a total of 236 daily round trip commuters at the Westborough Station in the year 2001. Nineteen are expected to be dropped off at the station. The remaining 217 riders would be Park'n'Ride patrons. Distribution of traffic is shown in Figure 5.1-4.

Again, as in the 1996 analyses, the signalized intersection at Route 9 and Otis Street was analyzed using the new geometry installed as part of the MHD intersection improvement project.

Tables 5.1-11 through 5.1-14 show the calculated levels of service at the signalized and unsignalized intersections for the "No Build" and "Build" conditions.

A review of the tables indicates that the signalized intersection of Route 9 and Otis Street will operate acceptably in both the "No Build" and "Build" conditions. A minor reduction in LOS is noted in the A.M. peak generator hour "Build" condition and in the P.M. peak generator hour "Build" condition. For the P.M. peak generator hour, the level of service at the intersection of Route 9 and Otis Street changes from LOS "D" (39.75 seconds of delay) under "No Build" to LOS "E" (40.79 seconds of delay) in the "Build" condition. A change of 1.04 seconds of delay is not significant.

Likewise, the unsignalized intersections are shown to function acceptably in the "No Build" and "Build" conditions. Traffic turning from Smith Valve Parkway to Otis Street will again experience some reduction in level of service, but will still operate acceptably.

The results of the road segment analysis are shown in Tables 5.1-15 and 5.1-16. As indicated, the road segments will operate at acceptable levels for both "No Build" and "Build" conditions. Smith Valve Parkway west of Otis Street experiences a minor reduction in level of service in the A.M. peak generator hour.

Table 5.1-11 2001 Signalized Intersection Level of Service - A.M. Peak Hours

Westborough	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Route 9 and Otis Street	C	C	C	C
Eastbound	C	C	C	C
Westbound	C	C	C	C
Northbound	D	D	D	D
Southbound	D	D	D	D

Table 5.1-12 2001 Signalized Intersection Level of Service - P.M. Peak Hours

Westborough	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Route 9 and Otis Street	E	E	D	E
Eastbound	E	E	F	F
Westbound	D	D	C	C
Northbound	E	E	D	E
Southbound	D	D	D	D

Table 5.1-13 2001 Unsignalized Intersection Level of Service - A.M. Peak Hours

Westborough	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Fisher and Gleason				
LT from EB Fisher	A	A	A	A
LT and RT from Gleason	A	A	A	A
Smith Valve and Site's DW				
LT from WB Smith Valve	-	A	-	A
LT from Lot	-	A	-	A
RT from Lot	-	A	-	A
Otis and Smith Valve				
LT from NB Otis	A	A	A	A
LT and RT from Smith Valve	B	C	B	B
Fisher and Mill				
LT from WB Fisher	A	A	A	A
LT and RT from Mill	B	B	B	B
Fisher and Maynard				
LT from EB Fisher	A	A	A	A
LT and RT from Maynard	A	A	A	A
Arch and Fisher				
LT from SB Arch	A	A	A	A
LT and RT from Fisher	A	A	A	A
Glen and Arch				
LT from EB Glen	A	A	A	A
LT and RT from Arch	A	A	A	A

Table 5.1-14 2001 Unsignalized Intersection Level of Service - P.M. Peak Hours

Westborough	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Fisher and Gleason				
LT from EB Fisher	A	A	A	A
LT and RT from Gleason	A	A	A	A
Smith Valve and Site's DW				
LT from WB Smith Valve	-	A	-	A
LT from Lot	-	A	-	A
RT from Lot	-	A	-	A
Otis and Smith Valve				
LT from NB Otis	A	A	A	A
LT and RT from Smith Valve	C	D	B	C
Fisher and Mill				
LT from WB Fisher	A	A	A	A
LT and RT from Mill	C	C	B	B
Fisher and Maynard				
LT from EB Fisher	A	A	A	A
LT and RT from Maynard	A	A	A	A
Arch and Fisher				
LT from SB Arch	A	A	A	A
LT and RT from Fisher	A	A	A	A
Glen and Arch				
LT from EB Glen	A	A	A	A
LT and RT from Arch	A	A	A	A

Table 5.1-15 2001 Road Segment Level of Service - A.M. Peak Hours				
Westborough	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Otis North of Smith Valve	C	C	C	C
Smith Valve West of Otis	B	B	B	C
Smith Valve West of Site	B	B	B	B

Table 5.1-16 2001 Road Segment Level of Service - P.M. Peak Hours				
Westborough	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Otis North of Smith Valve	D	D	C	C
Smith Valve West of Otis	B	B	B	B
Smith Valve West of Site	B	B	B	B

Summary of Findings

The streets and intersections within the Westborough study area operate at acceptable levels of service under the "No Build" and "Build" conditions for both year 1996 and year 2001 scenarios.

For both years 1996 and 2001, the signalized intersection of Route 9 and Otis Street will operate at level of service "C" during the A.M. peak and A.M. peak generator hours, for the No-Build and Build traffic conditions. During the P.M. peak hours analyzed, the intersection operates at level of service "D" for the No-Build and Build traffic conditions in 1996 and at level of service "E" in 2001.

The station traffic assigned for Route 9 westbound will utilize the left turn lane to Otis Street in the A.M. peak hours, and the right turn lane from Otis Street northbound to Route 9 in the P.M. peak hours. The capacity analysis shows that both movements are not the critical ones at the intersection. The intersection level of service is controlled mainly by Route 9 westbound through/right movements, (where the volume to capacity (v/c) ratio exceeds 0.9), and the eastbound left turn movement (where the v/c ratio exceeds 1.0).

In conclusion, the vehicle trips generated by the station will not have significant direct impact on the operation of the Otis Street/Route 9 intersection, and will not deteriorate the existing level of service at intersections within the study area. Conversely, the level of service at Route 9, particularly in the A.M. period, will not discourage station bound traffic from using Route 9 as an access route.

In summary, the analysis indicates that the construction of the proposed commuter rail station will not have an adverse impact on traffic operations within the Westborough study area.

5.2 Air Quality

Employing the rationale and methodology used in the November 1994 DEIR, the intersection of Route 9 and Otis Street was selected for the analysis (see Figure 5.1-1). Intersection improvements made by the Massachusetts Highway Department will allow the intersection to function at LOS C.

In order to simulate the highest CO concentrations, receptor locations were established along the sidewalk areas nearest to the traffic lanes. The offsets are 24 feet from the center of Otis Street and 48 feet from the center of Route 9. The results for the year 1996 are as follows in Table 5.2-1.

Table 5.2-1 1996 CO Concentrations - Route 9/Otis Street Intersection

	1-Hour CO (ppm)		8-Hour CO (ppm)	
	No Build	Build	No Build	Build
Southwest Sidewalk	9.3	9.3	6.5	6.5
Northwest Sidewalk	8.5	8.5	5.9	5.9
Northeast Sidewalk	8.3	8.4	5.8	5.9
Southeast Sidewalk	9.9	9.9	6.9	6.9

The predicted CO concentrations are the same for the "No Build" and "Build" conditions for both the 1-hour and 8-hour periods, with the exception of an increase of 0.1 ppm at the northeast sidewalk for both periods. All volumes are well below the 35 ppm for the 1-hour standard and 9 ppm for the 8-hour standard. Additional receptors evaluated

included the shopping plaza on the southwest, the vacant lot on the northwest, the apartment building (and parking area) on the northeast, and the car dealership building and display lot on the southeast. The predicted CO concentrations for the 1-hour case range from 4.3 ppm for the "No Build" to 7.8 ppm for the "Build" condition. Similarly the 8-hour values range from 3.0 ppm to 5.5 ppm for both conditions. Most predicted concentrations are the same or only slightly higher for "Build" versus "No Build".

5.3 Noise and Vibration

Noise Impact Analysis Methodology

Because of slow train speeds near stations, the potential for noise and vibration impacts from train operations is at a minimum compared to other segments of the right-of-way. There is, however, the potential of effects on the noise and vibration environment in the vicinity of the station because of project-induced traffic on roads leading to and from station areas, as well as short-term effects during construction of platforms, parking and other site facilities.

Traffic Noise

The significance of noise impacts from project-generated traffic near proposed commuter rail stations along the corridor was assessed based on the projected noise increase relative to the noise from existing traffic on applicable roads. Because the greatest changes in traffic volumes are expected to occur during peak commuting periods, the noise increase was evaluated in terms of the peak-hour L_{eq}.

Criteria for traffic noise impact are based on existing FTA guidelines, which state that a noise level increase of greater than 5 dBA is considered to represent a significant impact. The existing FTA criteria are used here rather than the proposed FTA criteria used in the train noise assessment because of the general, non-site specific nature of the traffic noise impact assessment. Where the existing layout of major roads will essentially remain the same, the traffic noise assessment predicts only the change in noise resulting from the projected change in traffic volumes near the stations, and not the absolute traffic noise levels at specific noise-sensitive locations in the community.

The traffic noise analysis estimates the change in peak-hour traffic noise as a function of the change in peak-hour traffic volume, assuming that all other non-project related noise sources remain unchanged.

Construction Noise and Vibration

The construction of a fixed facility such as a commuter rail station is expected to include clearing, excavation, foundation work, equipment installation, paving and finishing. Construction machinery is likely to include the types of equipment typically used for light industrial construction, such as graders, bulldozers, backhoes, cranes and trucks. Construction will typically occur during 8 to 10 hour weekday, daytime periods.

Construction of the station can be categorized in two distinct operations—parking lots and platform areas—with total duration of construction estimated to be approximately four to six months.

For a typical station site, the radius of significant noise impact was estimated to be 200 feet measured from the closest area of construction. In cases where noise-sensitive land uses were concentrated in a location very close to either the platform area or the parking area, separate screening distances were used to assess the two construction scenarios.

Station construction noise exposure was estimated using equipment noise levels and scenarios that are typical for non-residential construction (EPA, 1971). Usage factors were assigned to each piece of equipment to determine a cumulative reference noise level to use in determining the width of the noise impact zone.

Noise impact criteria for construction are based on the outdoor Annual Average Day-Night Equivalent Sound Level (AA L_{dn}), with a threshold of 65 AA L_{dn} defining the impact zone. This metric is slightly less conservative than the 24-hour L_{dn} used for train noise impact, given the short-term nature of construction noise impact. (A complete definition of metrics and terms pertaining to noise and vibration used in this report were given in Appendix, Volume II, Section 3.0 of the November 1994 DEIR.

The impact criteria for construction vibration are essentially the same as for train operations, except that impact is assessed only when the activity will occur for 30 days or more at a given location. Ground-borne vibration from construction was estimated based on equipment source data found in literature (Wiss, 1974; FHWA, 1982; FTA, 1990) . Vibration projections were made for the main equipment categories, based on the relative amount of energy imparted to the ground. Details on this methodology were given in Appendix, Volume II, Section 3.0 f the November 1994 DEIR. A screening

distance of 85 ft measured from the nearest area of construction was estimated for vibration impact from general construction activity at stations.

Traffic Noise Impacts

No additional roads are proposed to be built to access the Westborough station site; therefore, relative increase in traffic noise is sufficient for evaluating noise impact. During the morning peak hour, traffic volumes on Smith Valve Parkway between the station driveway and Otis Street will increase 40% over existing volumes. This increased traffic volume would result in approximately a 1.5 dB increase in peak hour L_{eq}, which is below the defined threshold of impact for relative noise increase. All other roads used by station patrons would experience lesser changes in relative noise levels for peak hour traffic conditions.

Construction Noise and Vibration Impacts

There are several residences on Fisher Street south of the station site in Westborough. All but three of these properties are located beyond the screening distance for construction noise impact, and there are no residences within the screening distance for vibration impact.

While the duration of station construction is expected to be approximately 4 to 6 months, construction activity near any of the potentially affected residences will be intermittent and of short duration. Vibration effects from heavy construction equipment would occur over a period measured in hours rather than days or weeks. No significant noise or vibration impacts are anticipated.

Traffic Noise Mitigation

No significant traffic noise impact was identified for the Westborough station.

Construction Noise and Vibration Mitigation

As described above, no significant noise impacts were identified from construction activities in Westborough Station. No site-specific mitigation plan is necessary.

Section 1.07 of the Standard Specifications used by the MBTA for construction contracts includes noise control measures as follows:

"Use every effort and every means possible to minimize noises caused by construction operations, which the Engineer may consider as objectionable. Provide working

machinery and equipment designed to operate with the least possible noise, and when gearing is used, such gearing shall be of a type designed to reduce noise to a minimum. Equip compressors with silencers on intake lines. Equip gas or oil operated equipment with silencers or mufflers on intake and exhaust lines. Wherever practicable, electricity shall be used for power to reduce noise. Dumping bins, hoppers, and trucks used for disposal of excavated materials shall be lined with wood or other sound-deadening material if required. Where required by agencies having jurisdiction, certain noise-producing work may be performed during specified periods only."

No significant construction vibration impact was identified for the Westborough Station site.

5.4 Site Drainage

The proposed Westborough Station site lies within the Assabet River watershed. The proposed station parking lot will be constructed in the upland areas of the site in order to avoid direct impact on the adjacent wetlands. The upland (westerly and southerly) areas of the site consist of grassed areas with scattered trees and shrubs. Subsurface soil conditions consist of sands and sandy loam and are classified as "somewhat excessively drained" according to standard soil classification.

Stormwater currently drains from the site in a northerly and easterly direction, either through drainage swales within the wetlands located near the east flank, or directly onto Smith Valve Parkway, where it enters a storm drain system within Smith Valve Parkway, is carried in a northerly direction through a series of drain pipes, and ultimately is discharged into Hocomonco Pond.

The proposed Westborough Rail Station will consist of 300 paved parking spaces, sidewalks, ramps, stairs, train platforms, landscaping and associated storm drain systems (see Figure 5.0-1). The project will implement Best Management Practices (BMPs) to mitigate any stormwater impacts created by the development. BMPs will include a parking lot sweeping program and a scheduled maintenance program to remove sediment loads from catch basin sumps and the detention basin. All catch basins will be equipped with sumps and oil and grease traps.

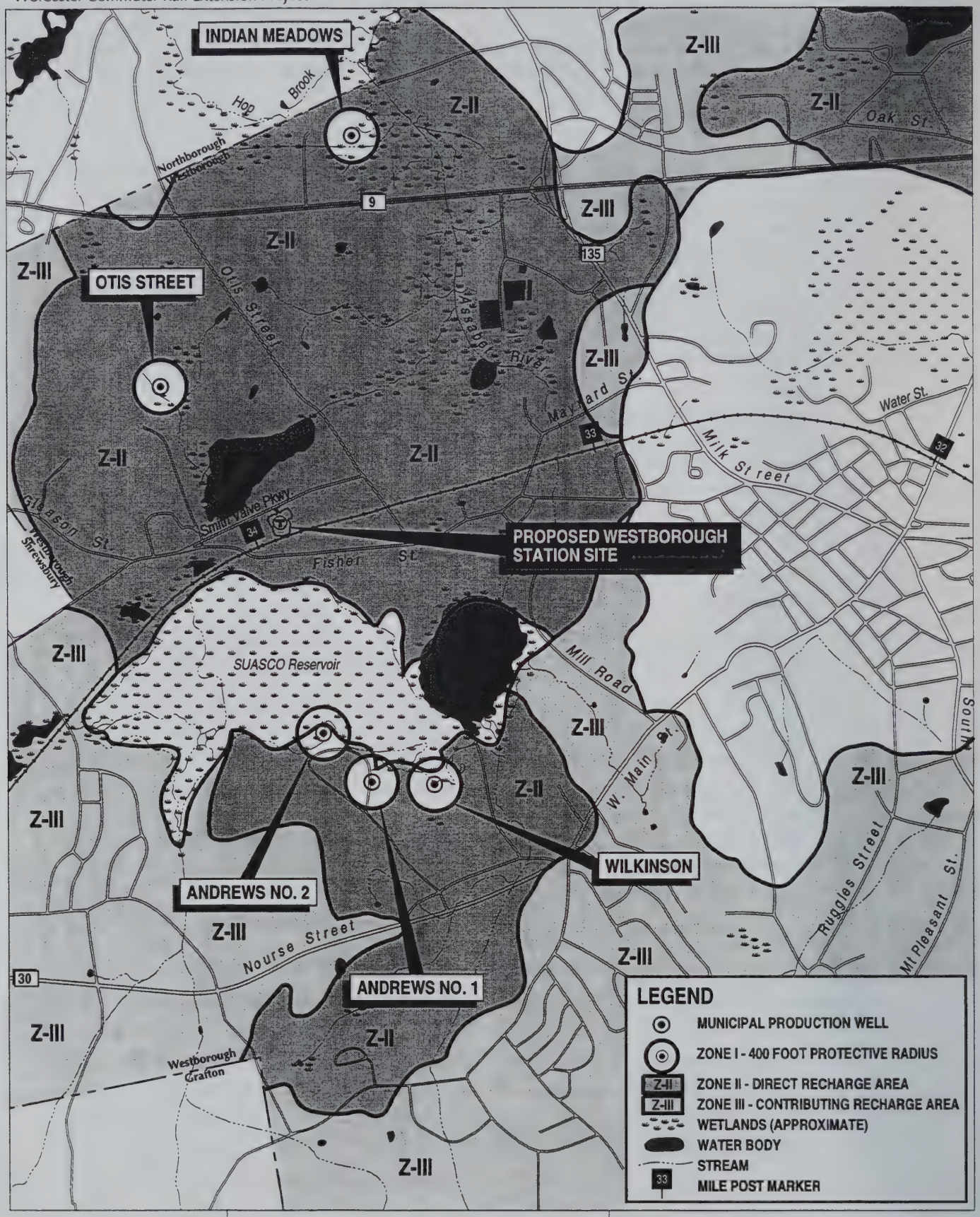
The proposed stormdrain system will mitigate increases in peak stormwater flow rates by construction of an on-site stormwater detention basin. The detention basin will be graded with sideslopes no steeper than three horizontal to one vertical (3 to 1), and the bottom will be vegetated and normally dry. The basin will be sized to accommodate flows from all storms up to and including the 100 year event. A multi-stage outlet control structure will be designed to release the detained stormwater at a peak flow rate which will not exceed existing conditions for the 10 and 100 year storm events while detaining stormwater flows from more frequent storms (up to the 2 year event) for extended periods of time. This type of extended detention basin will allow physical settling of sediments and associated pollutants such as trace metals and nutrients. This system will best replicate existing hydrological conditions, filtration, and infiltration of stormwater during smaller storm events while reducing peak flow rates during larger storm events. The outflow from the basin will be tied directly into the Smith Valve Parkway closed drainage system. Since peak flow rates will be reduced to or below pre-construction levels, no adverse impact on the existing stormdrain system will result.

Water Supply

Public groundwater supply wells in the study area include the Otis Street and Indian Meadows wells north of Hocomonco pond and the Wilkinson and Andrews wells to the south of the SUASCO Reservoir. (SUASCO is an acronym for the Sudbury, Assabet, and Concord, the three key rivers in the watershed.) The station site lies within the direct recharge area for the Otis Street and Indian Meadows wells. The direct recharge area for the three wells south of the station site does not include the station site. The wells and recharge areas are shown on Figure 5.4-1. Based on the proposed multi-stage/extended detention basin properties, and the fact that the outflows remain within the recharge area (the detention pond outlet ultimately flows to Hocomonco Pond), it is not expected that the station site will change either the quantity or quality of recharged groundwater in any adverse way.

5.5 Wetlands and Wildlife

Wetland resources in the vicinity of the Westborough station site include the SUASCO reservoir to the south and Hocomonco Pond to the north. The reservoir was discussed in the context of the rail right-of-way in Section 7.0 of the November 1994 DEIR. Hocomonco Pond, a federal superfund site, is discussed in Section 5.9.



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 2000'

0 2000

AQUIFER AND WATERSHED PROTECTION DISTRICTS TOWN OF WESTBOROUGH, MA

FIGURE 5.4-1

The SUASCO Reservoir was created in the mid 1970's at the headwaters of the Assabet River. This site is identified as the A1 site in the Corps of Engineers list of dams since it is the first dam site on the Assabet River. (The Sudbury River joins with the Assabet River in Concord to form the Concord River.) The Reservoir is a largemouth bass fishery and also is stocked with Northern Pike and Tiger Muskie.

A Great Blue Heron rookery, within the SUASCO impoundment, is approximately one quarter mile from the track. The colony has been declining in recent years because the trees that were flooded when the area was impounded are gradually falling, thus reducing the number of nesting sites. The state ornithologist has been studying the colony for years and is of the opinion that current train operations have no adverse impact on the birds and that any increase in activity on the rail line will not affect the colony.

The Westborough station site itself includes a cleared upland area and a wooded wetland area on the easterly portion of the site as shown on the site plan presented in Figure 5.0-1. The boundary for this wetland has been flagged and field surveyed. The wetland area contains drainage swales which carry surface runoff to a storm drain system under Smith Valve Parkway and eventually to Hocomonco Pond.

The site does not lie within any flood plain area as identified in the Flood Insurance Rate Map (FIRM) for the Town of Westborough, community-panel number 250344 0003 B, dated May 15, 1980.

The station parking lot has been configured in order to minimize wetland impacts to the fullest extent possible. The commuter rail station design has also incorporated wetland and water quality issues. The parking lot footprint will be within the buffer zone of the wetland resources to the east but no filling of bordering vegetated wetlands is proposed. BMPs proposed for this site are discussed in Section 5.4 Site Drainage. All final design elements will be coordinated with the Westborough Conservation Commission through filing of a Notice of Intent.

5.6 Historic Properties/Sites

The intent of the architectural survey, covered under the scope of work approved by the Massachusetts Historical Commission (MHC), is to identify and evaluate potentially historic properties within 50 feet of the center of the railroad right-of-way, but adjusted where conditions require. Buildings older than the prerequisite 50 years that were determined to lack integrity of design, materials, or historic association were rejected from the survey. In some areas, groups of buildings that were cohesive in terms of architectural style, historic associations, scale, and materials were considered as possible historic districts.

In Westborough, the Westborough Railroad Station and the West Main Street Historic District are considered as listed on the National Register. Survey properties at 25, 27, and 46 High Street Extension, 11, 13, and 15 State Street, 38, 43, and 49 Water Street and 20 Willow Street are deemed eligible for National Register listing as an extension of the West Main Street Historic District. The Eliezer Rice House at 37 Maynard Street is considered to be individually eligible for National Register listing. Of the six bridges surveyed in Westborough - Conrail over Arch Street, Fruit Street over Conrail, Conrail over East Main Street, Conrail over Mill Pond, Conrail over Maynard Street, and Conrail over Water Street - only the Conrail bridge over Mill Pond is considered, by MHC to be individually eligible for listing on the National Register. There is no impact to the bridge from this project.

West Main Street (Route 30) runs southwest from the rotary at the center of town and is from one-half to one mile from the rail line. The properties in the West Main Street Historic District and the property at 37 Maynard Street are not affected by the proposed project. The Volume II, Historic Properties Survey for the Right-of-Way of the Worcester Commuter Rail Extension, was submitted to the Massachusetts Historical Commission (MHC) in May 1996.

5.7 Archaeological Resources

Station area archaeological potential builds on the studies performed for the entire railroad right-of-way, where overall sensitivity ratings were developed, each implying different cultural resource survey recommendations. (See Appendix H in the March 1996 Final EIR.) The MBTA has performed a reconnaissance archaeological and cultural resources survey for the Westborough site. The proposed Westborough station would

occupy broadly level terrain within about 200 m. of Hocomonco Pond and other bodies of water. These characteristics imply a moderate probability that the proposed station area contains prehistoric or Contact-period sites. However, construction of a railroad siding has impacted the proposed station area, and prehistoric sites are not likely to have survived the associated grading. In accordance with the approved permit by the MHC, an intensive archaeological survey, including soil probes and test pits, will be performed. The complete report, covering the Westborough, Southborough and Ashland Station sites, is in progress.

5.8 Visual Impacts

The station, including a pedestrian overpass and associated stairs and ramps, will be compatible with the industrial area within which the facility will be located. The parking lot will be appropriately landscaped. The design will be compatible with Westborough's requirements in its General Industrial zone.

Lighting will be designed to consider both on and off-site conditions. Special consideration will be given to minimize the impact on houses located to the south of the station on Fisher Street. High pressure sodium lights on poles 20 feet in height will be used in the parking lot, as requested by the town. The light fixtures or luminaires will be the cut-off design which directs the light at the ground with minimum spillover to adjoining properties. The light source from a cut-off luminaire is not visible except when standing directly under the light. The lights will be on from dusk to approximately one-half hour after the last scheduled commuter train. Photoelectric cells will turn on the lights and a time clock will turn them off. There will be some increase in the ambient light during the period when the lights are on, but this increase is not expected to cause a visual disturbance to abutting houses on Fisher Street.

The dominant vertical feature of the station will be the pedestrian overpass elevated 21 feet above the tracks. Adding a canopy over its walkways, the overpass will have a total height of about 30 feet. The overpass stairways and access ramps connecting the north and south side station platforms will also be covered. It is anticipated that the top 10 feet of the overpass may be visible from the houses located on Fisher Street. Due to the distance between the overpass and the houses and the limited area which will be visible, there should not be a significant visual impact to the Fisher Street residential area.

Meetings have recently been held with town officials and local abuttors to discuss concerns over the safety, security, visual, and privacy issues of a railroad station abutting residential properties. In an effort to address these concerns the MBTA will construct a protective barrier between the residences and the station. This barrier will be constructed within an existing New England Power Company easement and will consist of an earthen berm, shrubbery and/or fencing. Final design of this barrier is being coordinated with the power company as well as the affected property owners. In addition, the design will include relocation and consolidation of the existing power lines.

An additional vertical element on the in-bound or south side of the tracks will be a covered canopy about 150 feet in length and 15 feet high to protect waiting commuters. The station platform canopy is generally considered a pleasing design element of a station. Because it will be only fifteen feet in height, it will not be visible from the abutting residential area, mainly due to construction of the protective barrier noted above.

5.9 Hazardous Materials

An environmental site evaluation was performed for the proposed Westborough Station site. The purpose of the evaluation was to determine whether hazardous materials or oil may be contained within the soils or groundwater at the site, within the meaning of Massachusetts General Law, Chapter 21E (M.G.L. c.21E).

The purpose of M.G.L. c.21E and its implementing regulations (310 CMR 40.00 - The Massachusetts Contingency Plan) is to "ensure the protection of health, safety, public welfare, and the environment by establishing requirements and procedures for the discovery, notification, assessment of, and response to, releases and threats of releases of oil or hazardous materials, and by identifying these oils and hazardous materials which are subject to these requirements and proceedings."

The environmental site evaluation consisted of the following elements:

1. A review of the site's history, which concluded that the site has been vacant and undeveloped since the early 1900s. Prior to this the site area was occupied by farmland and pastures. The Smith Valve Corporation has been the site owner since 1976.

2. A review of state and local records which indicated no spills or releases of hazardous materials or oil at the site. Hocomonco Pond, an EPA Superfund site located less than one eighth mile north, was used from 1928 until 1946 for wood preservation operations consisting of saturating products with creosote. (See further discussion below.)

3. A subsurface exploration program consisting of seven soil borings, seven test pits, and three monitoring wells. Soil samples were taken at each of the borings and test pits. Figure 5.9-1 shows the location of the wells and soil borings. The soil boring and test pit logs are available at the MBTA project office.

4. Soil and groundwater samples were analyzed in a laboratory by chemical screening methods.

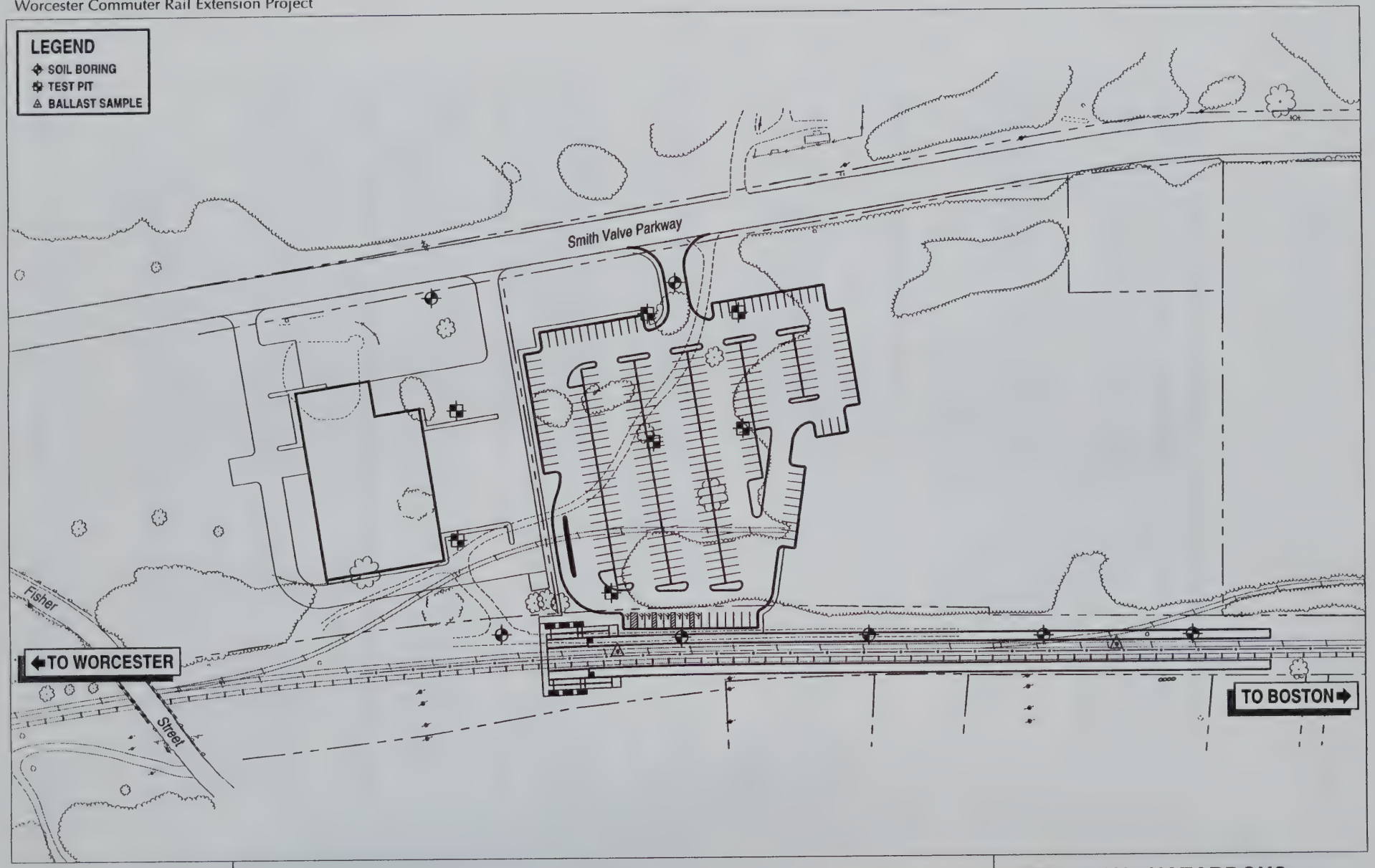
The results of the environmental site evaluation indicate no hazardous materials or oil in the soils or groundwater at the site. Furthermore, there is no evidence to indicate contaminants from the Hocomonco Pond Superfund site have impacted observed areas of the site.

Of the 8 Resource Conservation and Recovery Act metals, only low levels of cadmium were detected; however, the concentrations were well below reportable levels. Specifically, the environmental site evaluation results indicated the following:

- Results of the total volatile organic compound screening and gas chromatography screening of soil samples did not detect volatile organic compounds above background levels in the 49 soil samples analyzed. No pesticides or herbicides were detected above background levels in the composite surface soil sample collected at the site.

- No volatile organic compounds were detected in the groundwater samples collected at the site. Results of the analyses of pH and specific conductance detected typical pH and specific conductance readings for New England groundwater in three of the groundwater samples. One groundwater sample exhibited a pH of 4.0 which is slightly acidic for New England groundwater.

- Neither polychlorinated biphenyls nor petroleum hydrocarbons were detected in the composite ballast sample collected from the railroad bed in the area of the proposed platform at the site.



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 150'
0 150'

SITE PLAN - HAZARDOUS MATERIALS INVESTIGATION (21E) WESTBOROUGH, MA

FIGURE 5.9-1

Hocomonco Pond Superfund Site

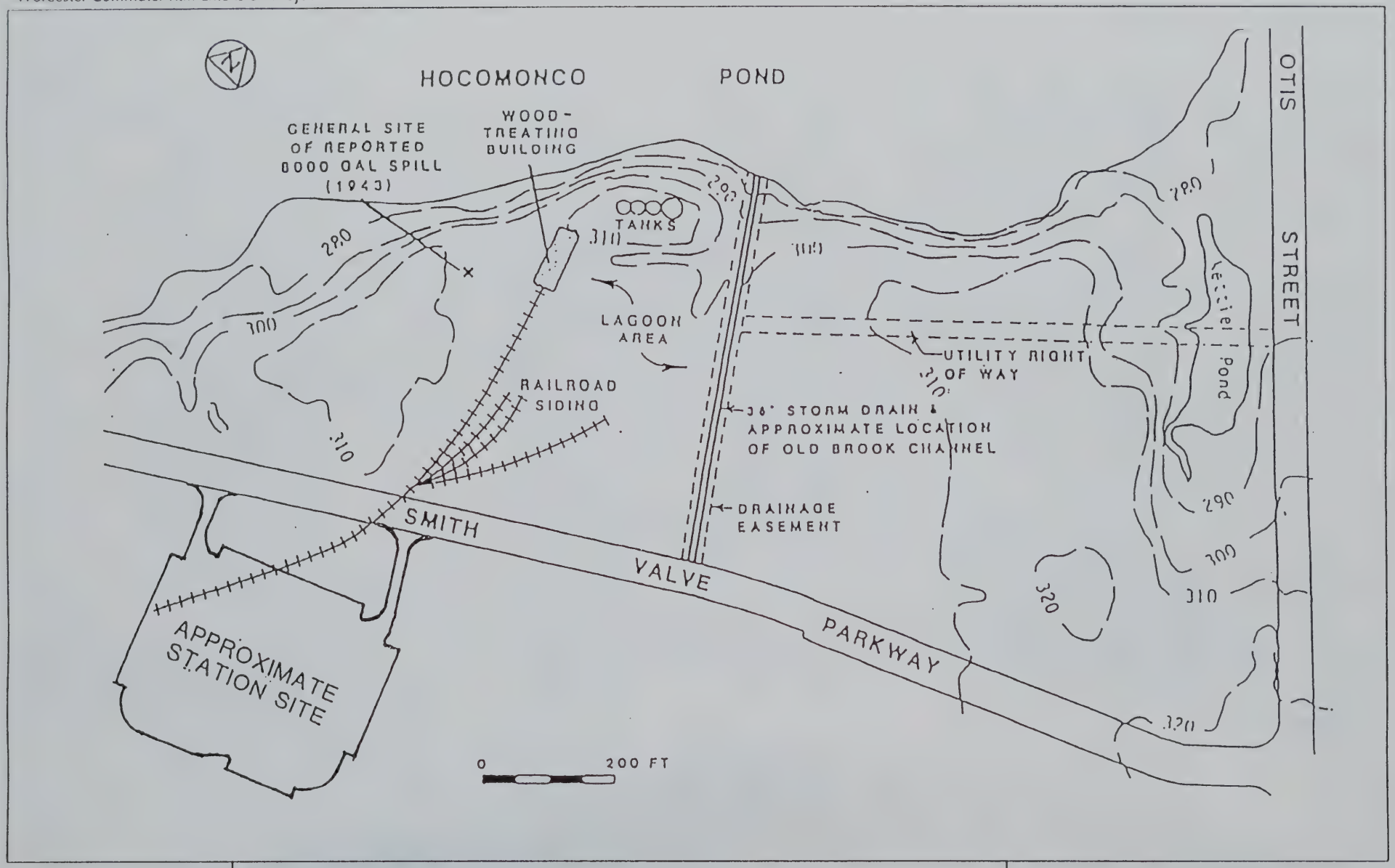
Hocomonco Pond is an EPA Superfund site located on Smith Valve Parkway north of the proposed Westborough station site (Figure 5.10-1). At the turn of the century, Hocomonco Pond was used as a source of block ice but since then has been an industrial site. Between 1928 and 1946 the site was used as a wood treating facility which saturated wood products with creosote. Creosote released from the site has contaminated soil, groundwater, and surface water. The cleanup of the site is being coordinated on the state level by DEP's Bureau of Waste Site Cleanup with the U.S. EPA. Studies carried out for the cleanup plan have determined that the extent of the contamination includes the former waste lagoon, Hocomonco Pond, the outlet stream to the Assabet River, and the small kettle pond adjacent to Otis Street.

The EPA has begun construction of facilities to be used in the remediation. Plans include the construction of an on site landfill for contaminated soil and sediments, capping of the former waste lagoon, installation of a water treatment plant to pump and treat groundwater, bio-remediation, and reconstruction of a portion of the storm drain system that crosses the site. Bio-remediation is a treatment process that uses biological reactions to break down contaminants in soil.

The storm drain system reconstruction has been completed. The storm drain system conveys runoff from surrounding upland areas, bypasses the former waste lagoon, and discharges into Hocomonco Pond. The runoff from the commuter rail station site will be retained on site to the extent possible and then connect to this system. Stormwater management for the rail station is discussed in detail in Section 5.4.

5.10 Pedestrian Safety

The CTPS ridership projections do not forecast any patrons walking to the Westborough station. The town has suggested provision of a sidewalk connecting the site to Otis Street, and possibly other sidewalks on nearby streets which would carry station oriented traffic. Recent meetings with town officials resulted in a basic agreement as to where sidewalks should be constructed. The sidewalks would benefit patrons who might walk to and from the Westborough Station, as well as other area pedestrians, including children



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Source: TRC Environmental Consultants, Inc.

HOCOMONCO POND SUPERFUND SITE

FIGURE 5.9-2

walking to local schools. Because there are no pedestrian safety impacts, the sidewalks are not considered as mitigation per se for station impacts. Rather, they are a community and MBTA patron benefit. The proposed sidewalks include the following:

- Along the southerly side of Fisher Street and Smith Valve Parkway from the Gleason Street intersection west of the station entrance to Otis Street, intersection east of the station, a total length of 3,700 feet.
- Along the west side of Otis Street from Astra Pharmaceutical southerly to Fisher Street, a total length of 3,600 feet.
- Along the southerly side of Fisher Street from Otis Street to Kimball Road, a total length of 2,000 feet.

As noted elsewhere, intertrack fencing will be constructed through the station area to discourage pedestrians from crossing the tracks. A pedestrian bridge, accessible to the handicapped, will be constructed over the tracks to connect station platforms to parking facilities.

5.11 Construction

Construction related impacts typically involve issues of traffic to and from the work site, air quality, noise and vibration, erosion and sedimentation, and safety. Construction will take approximately 4 to 6 months. Station site work will involve clearing, excavation, foundation construction, paving, and installing/erection of site facilities such as pedestrian bridges and station canopies. Construction equipment likely to be used includes graders, bulldozers, backhoes, cranes, and trucks.

Construction related traffic impacts are not expected to be significant. During certain short-term phases of construction, there will be concentrated deliveries of materials, such as during paving of the parking areas. Station construction will not be particularly labor-intensive, though, and traffic generated by the labor force will not adversely affect level of service on nearby roads.

There will be short-term, intermittent increases in air emissions from construction equipment and site-related construction traffic. No violations of air quality standards are anticipated.

Water will be sprayed on exposed earth surfaces to control fugitive dust from construction vehicle traffic or from wind erosion.

Silt barriers, consisting of hay bales and silt fence, will help trap sediments from construction site runoff. Limiting the area of earth exposed at any one time will minimize both wind and water erosion. Compliance with the requirements of an order of conditions issued by the Westborough Conservation Commission will ensure that any potential adverse effects on water quality and resource areas are minimized.

Potential construction noise and vibration impacts and possible mitigation are described in the preceding Section 5.3.

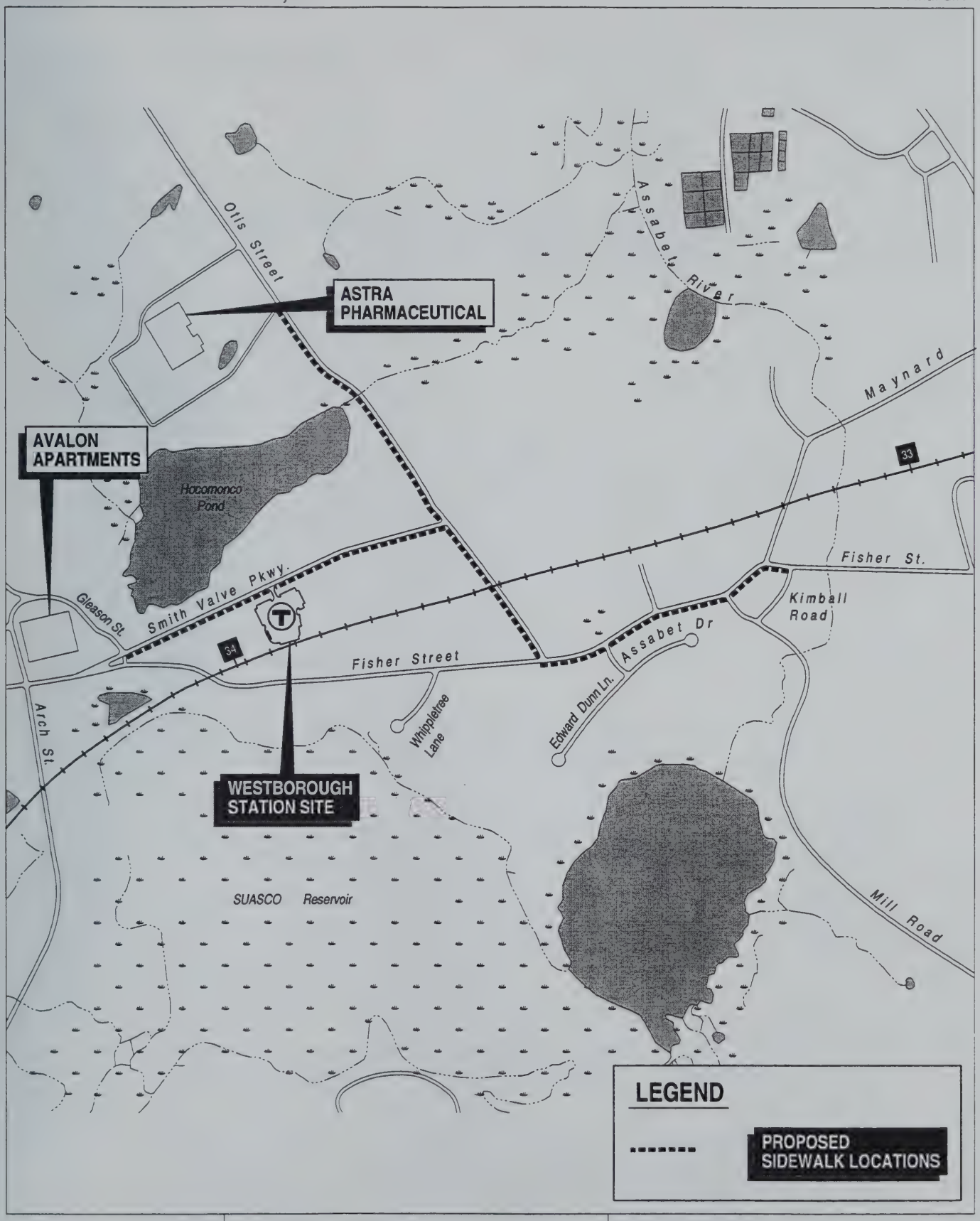
Station site construction activities that present a potential safety concern will be secured by temporary fencing or other barriers. The contractor will be required to adhere to all pertinent regulations regarding use and storage of hazardous or toxic materials on the site.

5.12 Proposed Mitigation

The streets and intersections within the Westborough study area were reviewed to identify locations which may require mitigation in accordance with the MBTA mitigation policy outlined in Section 2.8.

Traffic generated by the proposed commuter rail station will not cause any location within the Westborough study area to deteriorate from an acceptable level of service to an unacceptable level of service.

The Town on Westborough has expressed concern about increased traffic along the section of Fisher Street adjacent to the existing middle school. Specifically, the concerns involved the safety of school children along this portion of Fisher Street. As part of the construction of the commuter rail station, the MBTA will install guide signs indicating the route to the station. The signing will be installed so as to discourage station bound traffic from using the section of Fisher Street adjacent to the school. Any station generated traffic using this route would likely be local traffic and therefore would not be considered "new" traffic. Thus, no change to the existing conditions for this location is anticipated. But, in deference to the local concerns, the MBTA plans to extend sidewalks beyond the proposed Westborough Station at an estimated cost of $126,000 exclusive of right-of-way costs (See Figure 5.12-1).



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Approx. Scale: 1" = 1000'

0 1000

WESTBOROUGH STATION MITIGATION PLAN

FIGURE 5.12-1

SECTION 6.0 ENVIRONMENTAL IMPACTS—SOUTHBOROUGH STATION

Introduction

The proposed commuter rail station in Southborough will be in the southwest quadrant of the intersection of Southville Road and River Street (Route 85). In addition to the standard station amenities cited in Section 2.1, parking will be provided for 420 vehicles in two parking lots. North of the tracks, spaces will be provided for 90 cars adjacent to the general store; on the south side of the station, parking will be provided for 330 cars, with a new access drive connecting to Route 85. The site plan is shown on Figure 6.0-1.

With respect to the timing of station construction and operation and related traffic impacts, please refer to the explanation under the introduction to the Westborough Station in Section 5.0.

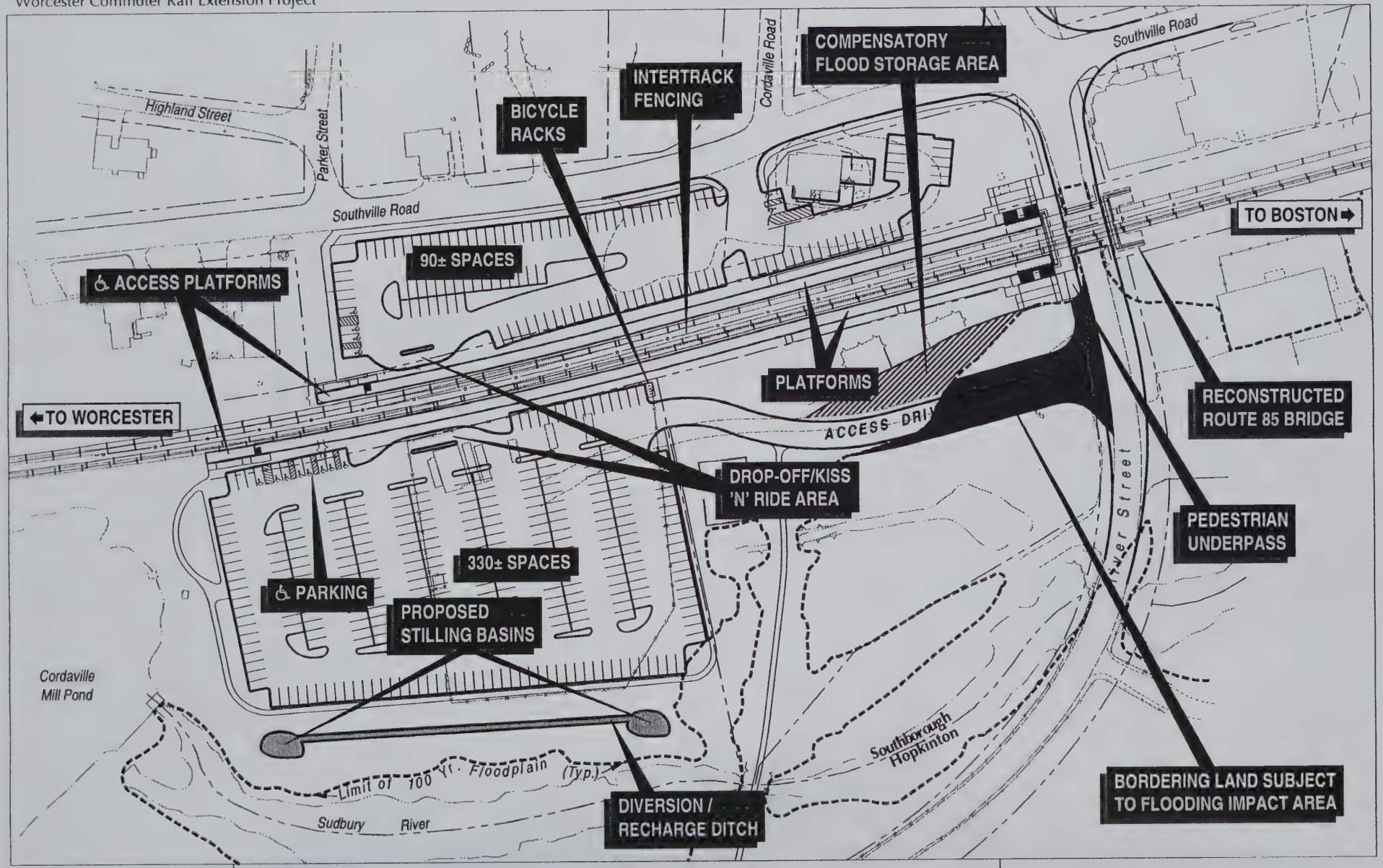
The Southborough Station is projected to attract 507 patrons in 1996, and daily ridership will remain relatively unchanged in 2011 because of the constraints on available parking.

Generally, the streets and intersections in the Southborough study area will function at acceptable levels of service for both the "No Build" and "Build" conditions. However, some locations operate at poor LOS during certain peak periods under both conditions.

The River Street/Southville Road intersection operates at LOS F for existing and future "No Build" condition. However, in conjunction with the reconstruction of the Route 85 Railroad Bridge, improvements to the intersection will include a new traffic signal system and left turn lanes for all movements.

The Cordaville Road/Main Street intersection, while operating at acceptable level of service in 1996, is expected to deteriorate to undesirable levels during the A.M. peak periods in 2001. It appears this is due to normal background traffic growth and will occur with or without the commuter rail station.

Traffic turning from Cordaville Road to River Street and traffic turning from Woodland Road to Cordaville Road experience undesirable levels of service under both "No Build" and "Build" conditions. The Cordaville Road/River Street intersection will be eliminated; no improvements to Woodland Road are proposed except for sidewalks.



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Approx. Scale: 1" = 125'

0 125

SITE PLAN
SOUTHBOROUGH STATION

FIGURE 6.0-1

Three residences on Southville Road may experience noise impact from construction, while two of these residences also may be subject to vibration impact. For construction activities south of the railroad, there are no existing residential structures within the screening distances for either construction noise impact or vibration impact.

Stormwater runoff from the parking area north of the tracks will connect into the existing storm drain in Southville Road. Stormwater runoff from the south parking lot will flow through a combination of stilling basins and diversion swales to minimize potential soil erosion and enhance water quality before discharging into the Sudbury River.

A portion of the southerly parking lot will be within the 100 foot buffer zone of the Sudbury River. A portion of the access road to the south lot and one corner of the southern parking will be within an area of bordering land subject to flooding (100 Year floodplain). Compensatory flood storage volume will be provided.

6.1 Local Traffic

This section provides a summary of the complete traffic analysis included in the November 1994 DEIR Appendix-Volume I. This section summarizes existing traffic conditions in Southborough, projected ridership for the Southborough Station, and the impact of that ridership on area streets and intersections.

Ridership projections for each proposed station were prepared by the Central Transportation Planning Staff (CTPS) in May 1994, and form the basis for traffic impact analyses used in the November 1994 DEIR. Ridership projections were updated by CTPS in January 1996. For Southborough Station, the updated ridership decreased by 43 riders, to 507 patrons, with minor adjustments in town of origin. When the updated ridership is redistributed to the trip network and traffic hours of concern, the net effect on level of service analyses performed for the Draft EIR is negligible.

The traffic analysis prepared for the Southborough Station focused on the streets and intersections identified in the ENF Certificate of the Secretary of Environmental Affairs. Figures 6.1-1 (A.M. Peak Hour) and 6.1-2 (P.M. Peak Hour) show the location for the streets and intersections that were analyzed as part of the study.

Analysis of the streets and intersections was performed for the existing conditions and the "No Build" and "Build" conditions for the years 1996 and 2001. A level of service (LOS)

was calculated for each street segment and intersection. A discussion of the LOS rating system was presented in Section 1.3 of the November 1994 DEIR. A summary of the LOS designations is as follows:

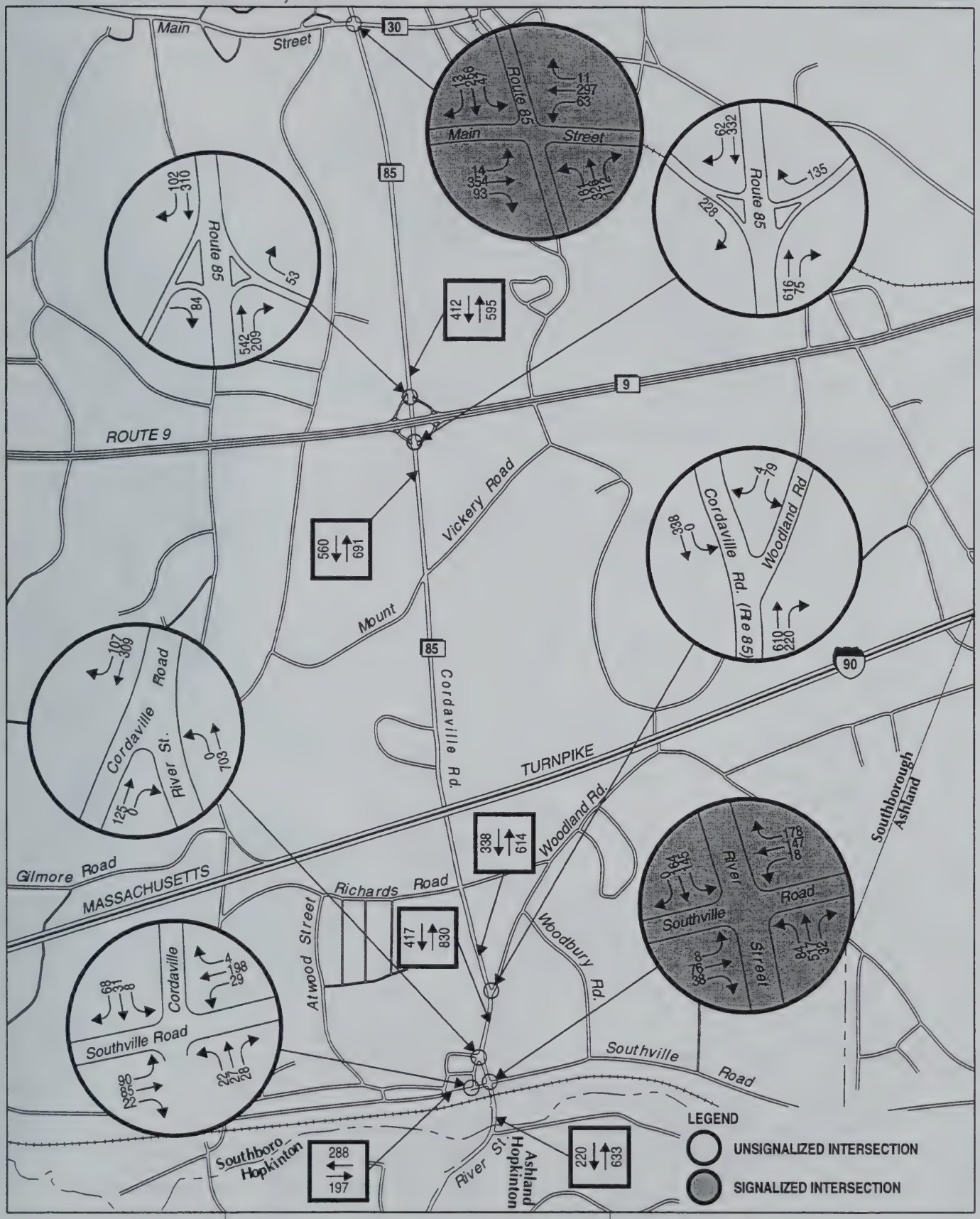
Rating	Judgment
A	Little or no delay
B	Short traffic delays
C	Average traffic delays
D	Longer than average delays
E	Very long traffic delays
F	Severe congestion, demand exceeds capacity

The results of the LOS analysis are presented for the A.M. and P.M. peak hours as well as the A.M. and P.M. peak generator hours. The A.M. and P.M. peak hours are those periods when traffic conditions are heaviest. The A.M. and P.M. peak generator hours are those periods when usage of the rail station is heaviest. Traffic count data showed that the A.M. and P.M. peak hours in Southborough are from 7:30 to 8:30 A.M. and 4:45 to 5:45 P.M., respectively. The A.M. and P.M. peak generator hours are from 7:00 to 8:00 A.M. and 5:30 to 6:30 P.M., respectively.

Existing Conditions

Existing conditions were determined by traffic counts and intersection turning movement counts conducted from the Fall of 1992 to the Spring of 1994. The counts were used to calculate existing condition levels of service for each of the intersections and street segments studied. Figures 6.1-1 and 6.1-2 show existing A.M. and P.M. peak hour volumes within the study area. Figure 6.1-3 shows the Average Daily Traffic (ADT) and Average Weekday Traffic (AWDT) for roads within the study area.

Tables 6.1-1 and 6.1-2 show the signalized and unsignalized intersection levels of service and Table 6.1-3 shows the roadway segment levels of service.



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Approx. Scale: 1" = 1750

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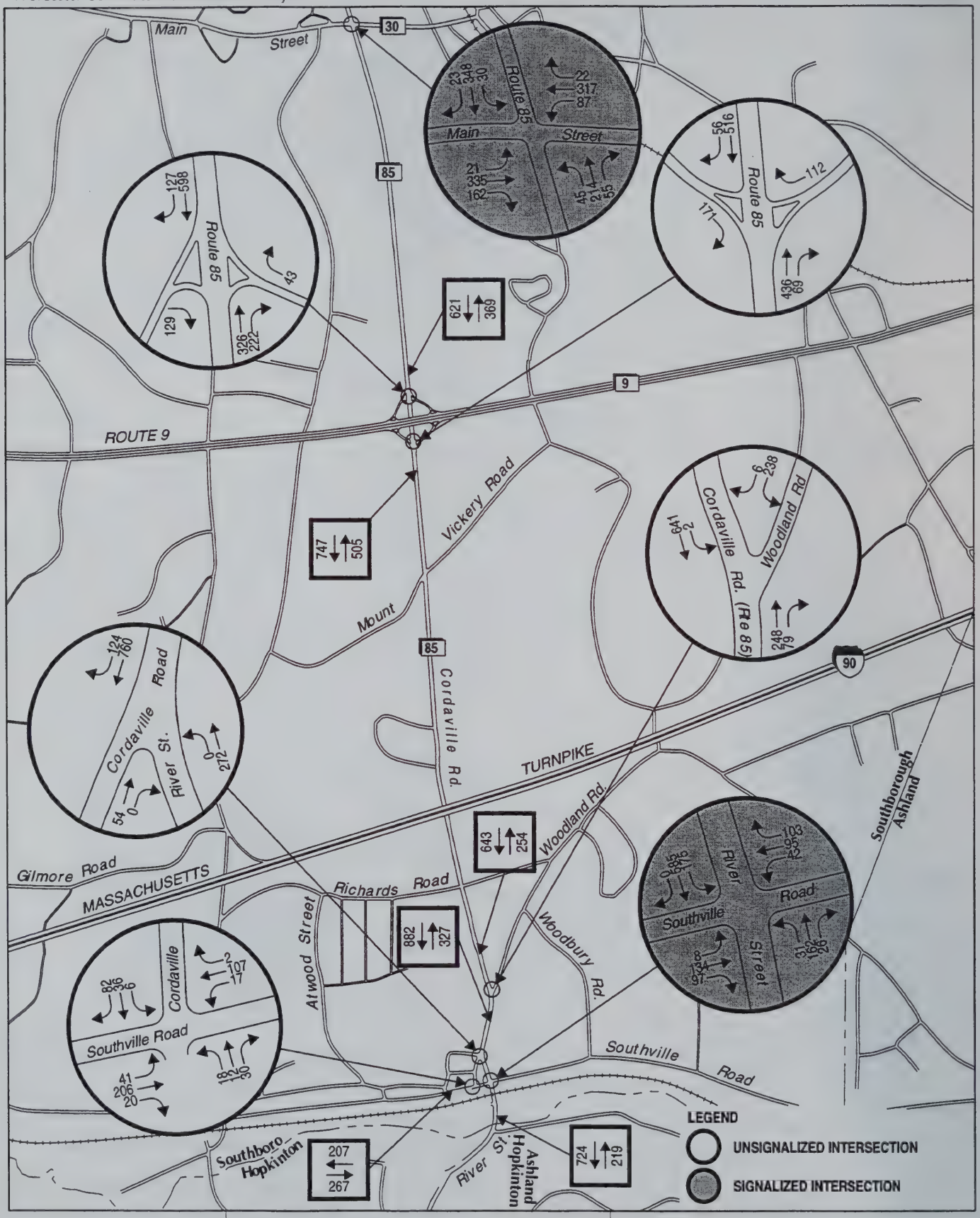
A.M. Peak Hour
7:30 - 8:30 A.M.
1992 Existing Conditions
SOUTHBOROUGH STATION

FIGURE 6.1-1



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Approx. Scale: 1" = 1750

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P.M. Peak Hour
4:45 - 5:45 P.M.
1992 Existing Conditions
SOUTHBOROUGH STATION

FIGURE 6.1-2

Table 6.1-1 1992 Existing Signalized Intersection Level of Service

Southborough	Peak Hour		Peak Generator Hour	
	A.M.	P.M.	A.M.	P.M.
River and Southville	F	E	F	D
Eastbound	B	B	B	B
Westbound	B	B	B	B
Northbound	F	C	F	B
Southbound	F	F	F	E
Cordaville and Main	D	C	D	B
Eastbound	B	C	B	B
Westbound	C	D	C	C
Northbound	F	B	E	B
Southbound	B	B	B	B

Table 6.1-2 1992 Existing Unsignalized Intersection Level of Service

Southborough	Peak Hour		Peak Generator Hour	
	A.M.	P.M.	A.M.	P.M.
Southville and Cordaville				
LT from EB Southville	A	A	A	A
LT from WB Southville	A	A	A	A
All from Store	A	A	A	A
All from Cordaville	A	A	A	A
Cordaville and River				
LT from NB River	A	A	A	A
LT and RT from Cordaville	E	E	E	D
Cordaville and Woodland				
LT from SB Cordaville	A	A	A	A
LT and RT from Woodland	E	F	E	E
NB Cordaville and EB Ramps				
RT from EB Route 9 Ramp	B	A	B	A
SB Cordaville and EB Ramps				
RT from EB Route 9 Ramps	A	B	A	A
NB Cordaville and WB Ramps				
RT from WB Route 9 Ramp	A	A	A	A
SB Cordaville and WB Ramps				
RT from WB Route 9 Ramp	A	A	A	A

Table 6.1-3 1992 Existing Road Segment Level of Service

Southborough	Peak Hour		Peak Generator Hour	
	A.M.	P.M.	A.M.	P.M.
River South of Site	D	E	D	D
Southville West of Site	C	C	C	C
Cordaville North of River	E	E	E	E
Cordaville North of Woodland	E	E	D	D
Cordaville South of Route 9	E	E	E	E
Cordaville North of Route 9	E	E	D	D

As shown in Table 6.1-1, the River Street/Southville Road intersection operates at undesirable LOS F in both the A.M. peak hour and the A.M. peak generator hour. Additionally, the northbound and southbound approaches also operate at LOS F in the A.M. peak hours. The Cordaville Road/Main Street intersection operates at acceptable levels of service in both the peak hours and the peak generator hours with only the northbound approach at LOS F in the A.M. peak hour.

Table 6.1-2 indicates that the unsignalized intersections generally function at acceptable levels of service. Only the turning movement from Woodland Road to Cordaville Road in the P.M. peak hour is at an undesirable level of service.

Table 6.1-3 shows that all the analyzed road segments are operating at lower levels of service, primarily due to their geometric deficiencies.

Safety Concerns and Accident History

The Southborough Police Department was contacted on June 22, 1994 to ascertain any high frequency accident locations or areas of safety concerns within the Southborough Station study area. Chief Colleary indicated that there were no high frequency accident locations within the study area. However, he did express concerns regarding safety and traffic flow at several locations. These concerns are discussed in Section 6.12 of this FEIR.

Rail Ridership Projections

Projections of rail ridership at each of the proposed stations of the Worcester Extension Project were prepared by the Central Transportation Planning Staff (CTPS) in May, 1994 and revised in January 1996. The revised ridership projections are included in Appendix D of the March 1996 FEIR. CTPS projected that in 1996 the Southborough Station would attract 507 daily round trip commuters. It is expected that 41 of these would be dropped off at the station. The remaining 466 would be Park'n'Ride patrons. Based on a vehicle occupancy rate of 1.12, the 466 Park'n'Ride patrons would result in a demand for 416 parking spaces.

Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 1750

0 1750

1992 Average Daily Traffic & 1992 Average Weekday Traffic
SOUTHBOROUGH, MA

FIGURE 6.1-3

The patrons of the Southborough Station are projected to originate from the Towns of Hopkinton, Marlborough, Southborough, Upton, and Westborough. Table 6.1-4 shows the town of origin of the projected Southborough Station riders.

Table 6.1-4 Projected Patrons of Southborough Station Year 1996

Town	Riders
Hopkinton	84
Marlborough	196
Southborough	91
Upton	95
Westborough	41
TOTAL	**507**

The impact of the commuter rail riders on area streets as they travel to the Southborough Station is determined by assigning those commuters to a particular route. Routing was selected based on the shortest travel time and/or distance from population centers. Riders who live in Southborough would utilize a variety of travel routes depending on the location of their residence.

The ridership from Hopkinton and Upton would use northbound Route 85 as the primary travel route, generally destined for the parking lot south of the tracks. Marlborough commuters would use southbound Route 85 while Westborough commuters will arrive from Route 9 eastbound to Route 85 southbound and from Flanders Road to Southville Road.

Figure 6.1-4 shows the distribution and percentage of station related traffic that would use Southborough area roadways.

Assignment of Riders to Trains

Commuter rail riders to the Southborough Station would arrive at the Southville Road/River Street Station to board one of four A.M. peak period trains and would leave the station in the P.M. peak period based on the five scheduled P.M. peak period trains. The distribution of riders to each train was determined by use of an equation based on observed arrival and departure data from several existing commuter rail lines. The observations of distribution by train tend to show the greatest number of riders on the trains arriving at Boston close to 8:30 A.M. Trains arriving earlier and trains getting to Boston after 9:00 A.M. tend to attract fewer riders. In the evening peak, the observations also shows greater ridership in the middle of what is normally considered peak commuting period.

1996 Traffic Impacts

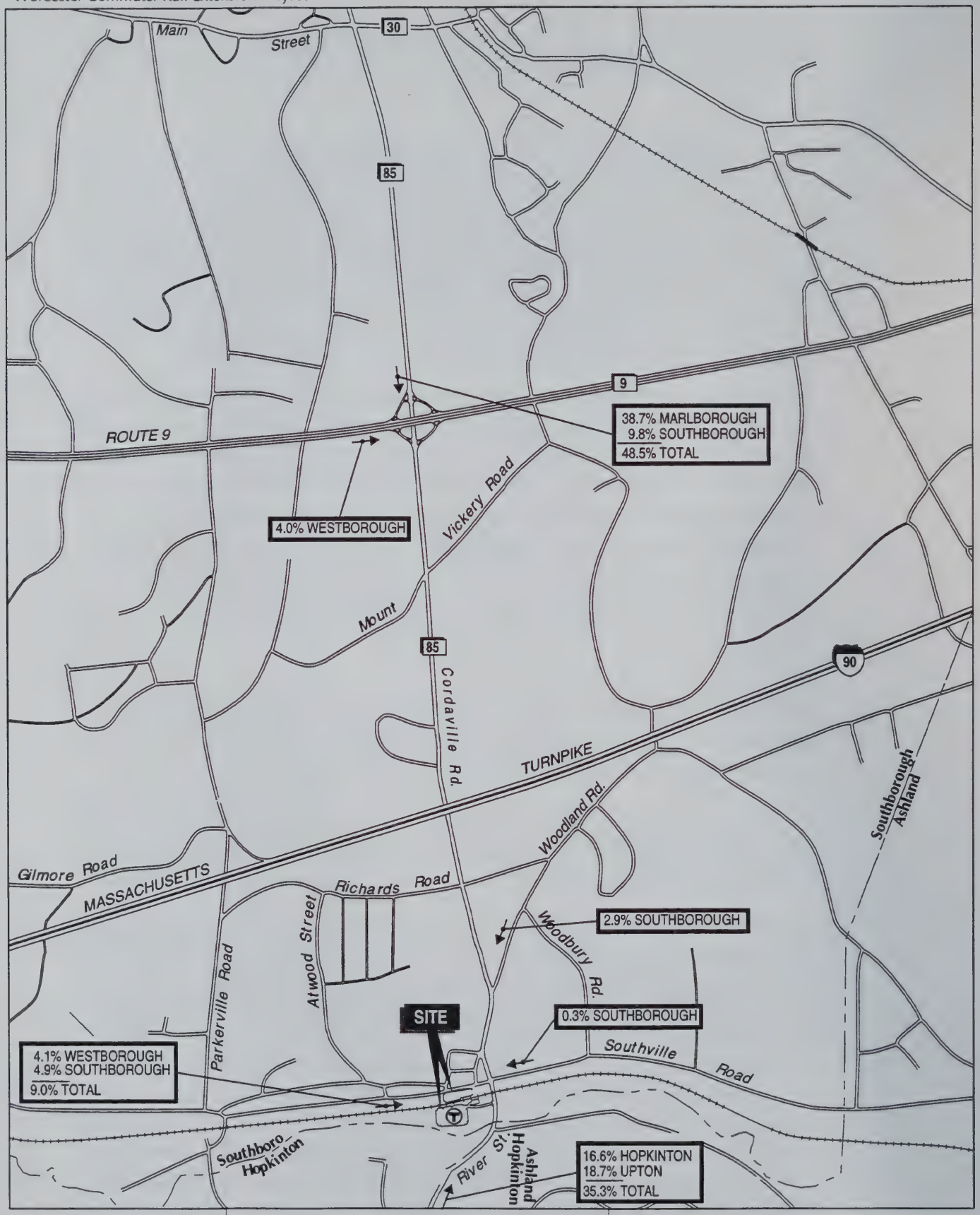
The 1996 traffic impacts must also consider background growth of traffic in addition to existing traffic volumes and the new riders destined for the station. Background growth is usually determined by tracking historical growth rates of permanent count locations. Historic traffic data from permanent count locations in Southborough showed variation in traffic growth with an average increase of 0.3%. For the purpose of this report, 0.5% annual growth of traffic volumes was used for projection from 1992 to 1996.

The traffic impacts of both a "No Build" and "Build" alternative were analyzed. The 1996 "No Build" alternative allows a comparison with the 1996 traffic impacts of building the commuter rail station. Different from the November 1994 DEIR, in which a 50% credit was taken for Hopkinton and Upton commuters already on the roads who would be diverted to the Southborough Station, the "Build" alternative now does not assume any redistribution of existing traffic on local roads. In other words, the commuters driving to the rail station are considered to be new trips. The "Build" analysis, therefore, does some double counting of vehicles and tends to be a worst case analysis. The new traffic generated by the station is added to the 1996 "No Build" volumes to develop the "Build" condition volumes.

The peak hour and peak generator hour overlap by 30 minutes in the A.M. period and 15 minutes in the P.M. peak period. Both the peak hours and the peak generator hours were analyzed to determine the impacts to the study area roadways and intersections.

Tables 6.1-5 through 6.1-8 present the results of the LOS analysis for the signalized and unsignalized intersections. The tables reflect "No Build" and "Build" conditions for the peak hours and peak generator hours.

Table 6.1-5 and 6.1-6 show that in the "No Build" condition the River Street/Southville Road intersection is operating at an undesirable level of service in both the A.M. and P.M. peak hours as well as the A.M. peak generator hour. The poor level of service is primarily the result of the existing signal timings. The Cordaville Road / Main



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 1750±

0 1750

Distribution of Commuter Rail Station Traffic
1996 BUILD ALL STATIONS
SOUTHBOROUGH STATION

FIGURE 6.1-4

Street intersection operates at acceptable levels of service for the P.M. peak hours under both the "No Build" and "Build" conditions. The northbound approach operates at LOS F in the A.M. peak hours. Both the westbound and northbound approaches experience a reduction to LOS F in the A.M. peak generator hour.

Table 6.1-5 1996 Signalized Intersection Level of Service - A.M. Peak Hours

Southborough	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
River and Southville	F	F	F	F
Eastbound	B	F	B	F
Westbound	B	C	B	C
Northbound	F	F	F	D
Southbound	F	F	F	F
Cordaville and Main	D	E	D	E
Eastbound	B	C	B	D
Westbound	C	E	C	F
Northbound	F	F	E	F
Southbound	B	C	B	B

Table 6.1-6 1996 Signalized Intersection Level of Service - P.M. Peak Hours

Southborough	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
River and Southville	F	F	D	E
Eastbound	B	D	B	F
Westbound	B	C	B	C
Northbound	C	E	B	B
Southbound	F	F	E	E
Cordaville and Main	C	C	B	B
Eastbound	C	B	B	B
Westbound	D	C	C	C
Northbound	B	C	B	C
Southbound	B	C	B	B

As shown in Tables 6.1-7 and 6.1-8 the unsignalized intersections generally operate at acceptable levels of service under the "No Build" and "Build" conditions. Woodland Road will function at LOS F in the P.M. peak hour under both "No Build" and "Build"

conditions. Under the "Build" condition, traffic turning from Cordaville Road to River Street will experience a decline from LOS E to LOS F in the A.M. peak hour, while traffic on Woodland Road will experience a decline from LOS E to LOS F in the P.M. peak generator hour. The proposed closure of the Cordaville Road/River Street intersection will eliminate the "Build" condition effect cited above.

Tables 6.1-9 and 6.1-10 lists the results of the roadway segment analysis.

As shown in the tables, all roadway segments operate at acceptable levels of service under both the "No Build" and "Build" condition.

Table 6.1-7 1996 Unsignalized Intersection Level of Service - A.M. Peak Hours

Southborough	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
River and Southern Lot				
LT from NB River	-	A	-	A
LT and RT from Southern Lot	-	C	-	C
Southville and Cordaville				
LT from EB Southville	A	A	A	A
LT from WB Southville	A	A	A	A
All from Northern Lot	-	A	-	A
All from Cordaville	A	B	A	A
Cordaville and River				
LT from NB River	A	A	A	A
LT and RT from Cordaville	E	F	E	E
Cordaville and Woodland				
LT from SB Cordaville	A	A	A	A
LT and RT from Woodland	E	E	E	E
NB Cordaville and EB Ramps				
RT from Route 9 EB Ramp	B	B	B	B
SB Cordaville and EB Ramps				
RT from Route 9 EB Ramp	A	B	A	B
NB Cordaville and WB Ramps				
RT from Route 9 WB Ramp	A	A	A	A
SB Cordaville and WB Ramps				
RT from Route 9 WB Ramp	A	A	A	A

Table 6.1-8 1996 Unsignalized Intersection Level of Service - P.M. Peak Hours

Southborough	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
River and Southern Lot				
LT from NB River	-	A	-	A
LT and RT from Southern Lot	-	D	-	D
Southville and Cordaville				
LT from EB Southville	A	A	A	A
LT from WB Southville	A	A	A	A
All from Northern Lot	-	A	-	A
All from Cordaville	A	B	A	A
Cordaville and River				
LT from NB River	A	A	A	A
LT and RT from Cordaville	E	E	D	E
Cordaville and Woodland				
LT from SB Cordaville	A	A	A	A
LT and RT from Woodland	F	F	E	F
NB Cordaville and EB Ramps				
RT from Route 9 EB Ramp	A	A	A	A
SB Cordaville and EB Ramps				
RT from Route 9 EB Ramp	B	B	A	A
NB Cordaville and WB Ramps				
RT from Route 9 WB Ramp	A	A	A	A
SB Cordaville and WB Ramps				
RT from Route 9 WB Ramp	A	A	A	A

Table 6.1-9 1996 Road Segment Level of Service - A.M. Peak Hours

Southborough	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
River South of Site	D	E	D	E
Southville West of Site	C	D	C	C
Cordaville North of River	E	E	E	E
Cordaville North of Woodland	E	E	D	E
Cordaville South of Route 9	E	E	E	E
Cordaville North of Route 9	E	E	E	E

Table 6.1-10 1996 Road Segment Level of Service - P.M. Peak Hours				
Southborough	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
River South of Site	E	E	D	D
Southville West of Site	C	C	C	C
Cordaville North of River	E	E	E	E
Cordaville North of Woodland	E	E	D	D
Cordaville South of Route 9	E	E	E	E
Cordaville North of Route 9	E	E	D	D

2001 Traffic Impacts

The level of service analysis is again presented for the Southborough intersections and roadway segments using year 2001 traffic volumes and ridership projections. Background growth of traffic amounting to 1.5% per year was assumed for the period 1996 to 2001.

CTPS projected that Southborough Station is expected to attract 511 daily round trip commuters in the year 2001, 470 of which will be Park'n'Ride patrons creating a demand for 420 parking spaces. Distribution of traffic is essentially the same as shown in Figure 6.1-4.

A LOS analysis was prepared for both peak hours and peak generator hours for the "No Build" and "Build" conditions.

The results of the analysis for the signalized and unsignalized intersections are presented in Tables 6.1-11 through 6.1-14.

The River Street/Southville Road intersection is expected to operate at LOS F under the "No Build" and "Build" condition. The proposed reconstruction of the intersection, with a complete new signal system, will correct any deficiency. (See Section 6.12) The Cordaville Road/Main Street intersection is expected to operate at LOS F in the A.M. peak hour "No Build" condition. In the "Build" condition the intersection is anticipated to function at LOS F in both the A.M. peak hour and A.M. peak generator hour.

As indicated in Tables 6.1-13 and 6.1-14 the unsignalized intersections generally will operate at acceptable levels of service under both "No Build" and "Build" conditions. As in the 1996 analysis, traffic turning from Cordaville Road to River Street and from Woodland Road to Cordaville Road will operate at LOS E or F during certain peak periods in the "No Build" and "Build" conditions.

Tables 6.1-15 and 6.1-16 present the results of the roadway segment analysis.

As shown, all segments operate at acceptable levels of service under the "No Build" and "Build" conditions.

Table 6.1-11 2001 Signalized Intersection Level of Service - A.M. Peak Hours

Southborough	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
River and Southville	F	F	F	F
Eastbound	B	D	B	C
Westbound	B	C	B	C
Northbound	F	F	F	E
Southbound	F	F	F	F
Cordaville and Main	F	F	E	F
Eastbound	C	D	C	D
Westbound	D	F	D	F
Northbound	F	F	F	F
Southbound	C	C	B	C

Table 6.1-12 2001 Signalized Intersection Level of Service - P.M. Peak Hours

Southborough	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
River and Southville	F	F	E	C
Eastbound	B	C	B	E
Westbound	B	C	B	C
Northbound	F	D	B	B
Southbound	F	F	F	D
Cordaville and Main	D	C	C	C
Eastbound	C	B	B	B
Westbound	F	D	D	C
Northbound	B	D	B	C
Southbound	B	C	B	B

Table 6.1-13 2001 Unsignalized Intersection Level of Service - A.M. Peak Hours

Southborough	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
River and Southern Lot				
LT from NB River	-	A	-	A
LT and RT from Southern Lot	-	D	-	D
Southville and Cordaville				
LT from EB Southville	A	A	A	A
LT from WB Southville	A	A	A	A
All from Northern Lot	-	A	-	A
All from Cordaville	A	B	A	A
Cordaville and River				
LT from NB River	A	A	A	A
LT and RT from Cordaville	F	F	E	F
Cordaville and Woodland				
LT from SB Cordaville	B	A	A	A
LT and RT from Woodland	E	F	E	E
NB Cordaville and EB Ramps				
RT from Route 9 EB Ramp	B	B	B	B
SB Cordaville and EB Ramps				
RT from Route 9 EB Ramp	A	B	A	B
NB Cordaville and WB Ramps				
RT from Route 9 WB Ramp	A	A	A	A
SB Cordaville and WB Ramps				
RT from Route 9 WB Ramp	A	A	A	A

Table 6.1-14 2001 Unsignalized Intersection Level of Service - P.M. Peak Hours				
Southborough	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
River and Southern Lot				
LT from NB River	-	A	-	A
LT and RT from Southern Lot	-	D	-	E
Southville and Cordaville				
LT from EB Southville	A	A	A	A
LT from WB Southville	A	A	A	A
All from Northern Lot	-	A	-	A
All from Cordaville	A	A	A	A
Cordaville and River				
LT from NB River	B	B	A	A
LT and RT from Cordaville	E	E	D	E
Cordaville and Woodland				
LT from SB Cordaville	A	A	A	A
LT and RT from Woodland	F	F	E	F
NB Cordaville and EB Ramps				
RT from Route 9 EB Ramp	A	A	A	A
SB Cordaville and EB Ramps				
RT from Route 9 EB Ramp	C	B	A	A
NB Cordaville and WB Ramps				
RT from Route 9 WB Ramp	A	A	A	A
SB Cordaville and WB Ramps				
RT from Route 9 WB Ramp	B	B	A	A

Table 6.1-15 2001 Road Segment Level of Service - A.M. Peak Hours				
Southborough	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
River South of Site	E	E	E	E
Southville West of Site	D	D	C	C
Cordaville North of River	E	E	E	E
Cordaville North of Woodland	E	E	E	E
Cordaville South of Route 9	E	E	E	E
Cordaville North of Route 9	E	E	E	E

Table 6.1-16 2001 Road Segment Level of Service - P.M. Peak Hours

Southborough	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
River South of Site	E	E	D	D
Southville West of Site	C	C	C	C
Cordaville North of River	E	E	E	E
Cordaville North of Woodland	E	E	D	D
Cordaville South of Route 9	E	E	E	E
Cordaville North of Route 9	E	E	D	E

Summary of Findings

Generally, the streets and intersections in the Southborough study area function at acceptable levels of service for both the "No Build" and "Build" conditions. However, some locations operate at LOS E or F during certain peak periods under both conditions.

The River Street/Southville Road intersection operates at LOS F in the "No Build" condition. The "Build" condition for River Street/Southville Road intersection shown in the previous tables does not include mitigation. The proposed intersection improvements, including a new signal system, roadway widening and channelization, will remove any deficiencies under the "Build" condition.

The Cordaville Road/Main Street intersection, while operating at C and D levels in 1996, is expected to deteriorate to LOS E and F levels during the A.M. peak periods in 2001. It appears this is due to normal traffic growth and will occur with or without the commuter rail station.

Traffic turning from Cordaville Road to River Street and traffic turning from Woodland Road to Cordaville Road experience E and F levels of service under both "No Build" and "Build" conditions. The Town of Southborough has expressed a desire to make improvements at these locations in conjunction with the commuter rail project. Mitigation will include the closure of the Cordaville Road/River Street intersection.

Proposed mitigation in Southborough is discussed in Section 6.12 of this Final EIR.

6.2 Air Quality

Employing the rationale and methodology used in the November 1994 DEIR, the intersection of Cordaville Road (Route 85) and Main Street (Route 30) was selected for the analysis (see Figure 6.1-1). Consideration was given to the River Street (Route 85) and Southville Road intersection, but the reconstruction of the intersection would correct the existing deficiency and CO concentrations would be less than at the Route 85/Route 30 intersection.

In order to simulate the highest CO concentrations, receptor locations were established along the sidewalk areas nearest to the traffic lanes. The offsets are 15 feet from the center of both Cordaville Road and Main Street. The results for the year 1996 are as follows in Table 6.2-1.

Table 6.2-1 1996 CO Concentrations - Route 85/Route 30 Intersection

	1-Hour CO (ppm)		8-Hour CO (ppm)	
	No Build	Build	No Build	Build
Southeast Sidewalk	6.8	6.7	4.8	4.7
Southwest Sidewalk	6.3	6.4	4.4	4.5
Northwest Sidewalk	6.0	6.4	4.2	4.5
Northeast Sidewalk	6.2	6.5	4.3	4.6

The predicted CO concentrations are only slightly higher for the "Build" than the "No Build" conditions for both the 1-hour and 8-hour periods, with the exception of the southeast sidewalk which exhibits a decrease of 0.1 ppm under the "Build" condition for both time periods. All values are well below the 35 ppm for the 1-hour standard and 9 ppm for the 8-hour standard. Additional receptors evaluated included 3 single-family dwellings, the Town Library, the Police/Fire Station, and the American Legion Post. The predicted CO concentrations for the 1-hour case range from 3.6 ppm for the "No Build" condition to 5.0 ppm for the "Build" condition. Similarly the 8-hour values range from 2.5 ppm to 3.5 ppm. Most predicted concentrations are the same or only slightly higher for "Build" versus "No Build".

6.3 Noise and Vibration

Noise Impact Analysis Methodology

Because of slow train speeds near stations, the potential for noise and vibration impacts from train operations is at a minimum compared to other segments of the right-of-way. There is, however, the potential for effects on the noise and vibration environment in the vicinity of the station because of project-induced traffic on roads leading to and from station areas, as well as short-term effects during construction of platforms, parking and other site facilities.

Traffic Noise

The significance of noise impacts from project-generated traffic near proposed commuter rail stations along the corridor was assessed based on the projected noise increase relative to the noise from existing traffic on applicable roads. Because the greatest changes in traffic volumes are expected to occur during peak commuting periods, the noise increase was evaluated in terms of the peak-hour L_{eq}.

Criteria for traffic noise impact are based on existing FTA guidelines, which state that a noise level increase of greater than 5 dBA is considered to represent significant impact. The existing FTA criteria are used here rather than the proposed FTA criteria used in the train noise assessment because of the general, non-site specific nature of the traffic noise impact assessment. Where the existing layout of major roads will essentially remain the same, the traffic noise assessment predicts only the change in noise resulting from the projected change in traffic volumes near the stations, and not the absolute traffic noise levels at specific noise-sensitive locations in the community.

The traffic noise analysis estimated the change in peak-hour traffic noise as a function of the change in peak-hour traffic volume assuming that all other non-project related noise sources remain unchanged.

Construction Noise and Vibration

The construction of a fixed facility such as a commuter rail station is expected to include clearing, excavation, foundation work, equipment installation, paving, and finishing. Construction machinery is likely to include the types of equipment typically used for light industrial construction, such as graders, bulldozers, backhoes, cranes, and trucks. Construction will typically occur during 8 to 10 hour weekday, daytime periods.

Construction of the station can be categorized in two distinct operations—parking lots and platform areas—with total duration of construction estimated to be approximately four to six months.

For a typical station site, the distance to significant noise impact was estimated to be 200 feet measured from the closest area of construction. In cases where noise-sensitive land uses were concentrated in a location very close to either the platform area or the parking area, separate screening distances were used to assess the two construction scenarios.

Station construction noise exposure was estimated using equipment noise levels and scenarios that are typical for non-residential construction (EPA, 1971). Usage factors were assigned to each piece of equipment to determine a cumulative reference noise level to use in determining the width of the noise impact zone.

Noise impact criteria for construction are based on the outdoor Annual Average Day-Night Equivalent Sound Level (AA L_{dn}), with a threshold of 65 AA L_{dn} defining the impact zone. This metric is slightly less conservative than the 24-hour L_{dn} used for train noise impact, given the short-term nature of construction noise impact. (A complete definition of metrics and terms pertaining to noise and vibration used in this report are given in Appendix, Volume II, Section 3.0 of the November 1994 DEIR.)

The impact criteria for construction vibration are essentially the same as for train operations, except that impact is assessed only when the activity will occur for 30 days or more at a given location. Ground-borne vibration from construction was estimated based on equipment source data found in literature (Wiss, 1974; FHWA, 1982; FTA, 1990) . Vibration projections were made for the main equipment categories, based on the relative amount of energy imparted to the ground. Details on this methodology are given in the Appendix cited above. A screening distance of 85 ft measured from nearest area of construction was estimated for vibration impact from general construction activity at stations.

Traffic Noise Impacts

There are scattered residences along the north side of Southville Road directly across from the proposed Southborough Station site, on both sides of Southville Road just west of the site, and on Cordaville Road north of the station site. These homes are typically 40 to 50 feet from the roadway centerline.

No significant additional roadways are proposed for Southborough station. Hence, the relative increase in peak-hour L_{eq} was used as the measure of project-generated traffic noise impact. The peak-hour traffic volume on both Southville Road and River Street is projected to increase by a factor of 1.1, resulting in less than 1 dBA increase in the peak-hour L_{eq}. No noise impact from traffic, therefore, is projected for the Southborough Station area.

Construction Noise and Vibration Impacts

Three residences on Southville Road may experience noise impact from construction north of the rail line, while two of these residences may be subject to vibration effects. For construction activities south of the rail line, there are no existing residential structures within the screening distances for either construction noise impact or vibration impact.

While the duration of station construction is expected to be approximately 4 to 6 months, construction activity near any of the potentially affected residences will be intermittent and of short duration. Vibration effects from heavy construction equipment would occur over a period measured in hours rather than days or weeks. No significant noise or vibration impacts are anticipated.

Traffic Noise Mitigation

No significant traffic noise impact was identified for the Southborough station.

Construction Noise and Vibration Mitigation

As described above, no significant noise impacts were identified from construction activities at Southborough Station. No site-specific mitigation plan is necessary.

Section 1.07 of the Standard Specifications used by the MBTA for construction contracts include noise control measures as follows:

"Use every effort and every means possible to minimize noises caused by construction operations, which the Engineer may consider as objectionable. Provide working machinery and equipment designed to operate with the least possible noise, and when gearing is used, such gearing shall be of a type designed to reduce noise to a minimum. Equip compressors with silencers on intake lines. Equip gas or oil operated equipment with silencers or mufflers on intake and exhaust lines. Wherever practicable, electricity shall be used for power to reduce noise. Dumping bins, hoppers, and trucks used for disposal of excavated materials shall be lined with wood or other sound-deadening

material if required. Where required by agencies having jurisdiction, certain noise-producing work may have to be performed during specified periods only."

No significant construction related vibration impact was identified at Southborough Station and no mitigation is required.

6.4 Site Drainage

The proposed Southborough Station is within the Sudbury River watershed. Existing land uses include a general store with associated unpaved north of the tracks and a contractor storage yard south of the tracks. The site area north of the railroad tracks slopes generally down in an easterly direction. Stormwater runoff currently is directed to the Southville Road and River Street storm drain system which ultimately discharges into the Sudbury River. The proposed station area south of the tracks slopes away from the rail line in both a southerly and easterly direction. Stormwater runoff currently drains entirely by overland flow into the Sudbury River.

A subsurface exploration program was performed for the site, which consisted of 5 soil borings and 11 test pits. Subsurface conditions north of the tracks consisted typically of a 5 foot to 10 foot layer of fine to coarse sands and gravels, underlain by a very dense material (refusal). South of the tracks, subsurface conditions consisted typically of a 5 foot to 8 foot layer of construction fill (boulders, cobbles, sands, silts, etc.) underlain by fine to coarse, well drained sands and gravels. Depth to groundwater varies between 9 feet and 19 feet.

The proposed project development will consist of 420 paved parking spaces (90 spaces north and 330 spaces south of the tracks), sidewalks, train platforms, ramps, stairs, and landscaping. It is also proposed to widen and reconstruct the existing railroad bridge over Route 85.

Best Management Practices (BMPs) will be implemented to mitigate any stormwater impacts generated by this project. Water quality BMPs will include catch basins with sumps and oil and grease traps. Catch basin sumps are very effective in removing larger sized sediments, with associated contaminants, from parking lot runoff.

General maintenance of the station will include the implementation of a regular parking lot sweeping program. One objective of a sweeping maintenance program is to remove as many contaminants as possible from the parking lot surface before they are washed into the stormwater collection system. Studies have determined that a large percentage of contaminant loads are bound to fine particulates (silt and clay particles) and thus a regular sweeping program will be effective in reducing pollutant loadings and improving runoff water quality. Cleaning of catch basins will remove additional coarse sediment and large debris from the stormdrain system.

The maintenance program also will include the removal of trash, leaves, and fallen branches. This will not only reduce loadings of nutrient related contaminants, but will keep the stormwater collection system clear and working properly.

Stormwater runoff from the parking area north of the tracks will connect into the existing storm drain in Southville Road. Stormwater runoff from the south parking lot will flow through a combination of stilling basins and diversion swales before discharging into the Sudbury River. These BMP's will serve to avoid any potential for soil erosion and enhance water quality.

No stormwater detention facility is proposed for this station. Typically detention facilities are designed to store stormwater runoff temporarily and release it at a controlled rate so that peak flow rates will not be exceeded at the discharge point. The project site discharge point is the Sudbury River at the concrete box culvert under Route 85. Because the project site lies at the bottom of a very large watershed, it becomes advantageous to discharge the site runoff quickly before the larger peak flows from the remaining watershed arrive. If stormwater were detained on site, the peak detention pond outflows may coincide with remaining watershed peaks and actually increase the peak flow rates.

All final design elements including implementation of a Vegetative Management Plan (VMP) to control overgrowth within stilling basins and diversion swales will be coordinated with the Southborough Conservation Commission through filing of a Notice of Intent.

Water Supply

Southborough is served by the Massachusetts Water Resources Authority for its public water supply. A private drinking water supply well is located approximately one eighth mile upgradient of the station site. The adjacent area of Hopkinton is served by private wells. The storm drainage from the proposed station site would drain into the Sudbury River and most likely would not relate hydrologically to any wells in the vicinity.

6.5 Wetlands and Wildlife

The Sudbury River and the Cordaville millpond are the dominant wetland resources associated with the proposed Southborough station site. Other resources include bordering vegetated wetlands, bordering land subject to flooding, and river front area. Subsurface investigations indicate that layers of fill have been placed adjacent to the river on the site of the former woolen mill. The historical land use as a rail yard and woolen mill have altered the wetland environment since at least the mid 1800's. The pond, which is an impoundment on the Sudbury River, has a main overflow structure/dam. A second outlet structure for the raceway that was constructed for the mill operation is no longer used. The pond is occasionally stocked with trout and supports warmwater fish species.

Streams and wetlands north of the station site have records of Spotted Turtles and Wood Turtles, species of Special Concern, but these areas are outside of the project area and would not be disturbed by the proposed project.

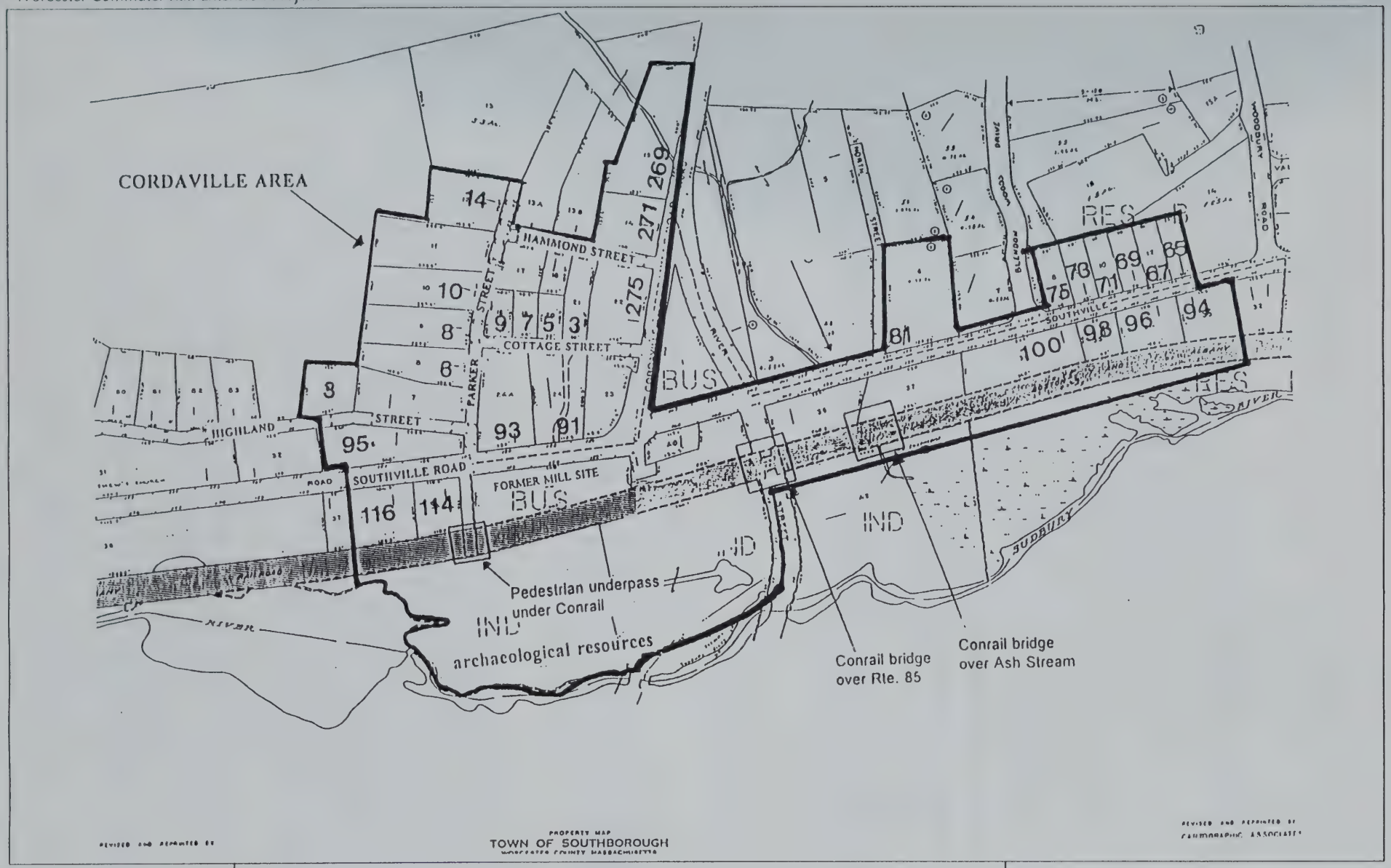
About one third of the southerly parking lot will be within the 200 foot river front area of the Sudbury River and a small portion will be within the 100 foot buffer zone. A portion of the access road to the south lot and one corner of the southern parking lot will be within an area of bordering land subject to flooding (100 Year floodplain). Compensatory flood storage volume will be provided for the volume of floodplain filled by the proposed construction.

Development of a commuter rail station at this site provides an opportunity to enhance recreational activities associated with the Sudbury River and Cordaville Pond. Cordaville Pond and the adjacent sections of the Sudbury River lie within a relatively secluded area, are on private property and, as such, provide little or no means of public access. Development of the proposed Southborough Commuter Rail Station will provide public access (vehicular, pedestrian, bicycle, etc.) to these areas. In addition, the MBTA is proposing construction of sidewalks within a one half mile radius of the site to promote pedestrian activity to the site. This work will include a sidewalk through the site, across a stone arch bridge over the Sudbury River, continuing in a southerly direction and connecting to the entrance of the Hopkinton State Park. Coordination with the Southborough Conservation Commission, the Massachusetts Department of Fisheries, Wildlife, and Environmental Law Enforcement and the Sudbury Valley Trustees during the final design of the station will ensure that recreational resources are protected and/or enhanced.

6.6 Historic Properties/Sites

The explanation of the architectural survey presented for the Westborough Station in Section 5.6 of this FEIR applies here as well. Emphasis is on the Village of Cordaville, the site of the proposed Southborough Station. The site is adjacent to and within a historic, archaeological and industrial area which has been determined to be eligible for the National Register of Historic Places. The area of Cordaville is bounded on the east by the house at 65 Southville Road, on the north by the house at 269 Cordaville Road, on the west by 95 Cordaville Road, and on the south by the foundation ruins of the former Cordaville Woolen Company (See Figure 6.6-1). The Village of Cordaville is primarily a residential neighborhood with buildings from the Early Industrial, Late Industrial, and Early Modern Periods. The residences are mostly detached, wood-frame structures between 1-1/2 and 2-1/2 stories in height. They retain integrity of design, location, and setting of a typical historic worker village. The village was one of two mill villages established in response to construction of the Boston and Albany Railroad through Southborough in the early 1830's. The Village of Southville located to the west on Southville Road has been determined also to be eligible for listing on the Register. There are no station-related effects on the Village of Southville.

The area of Cordaville in Southborough is eligible for the National Register of Historic Places because it retains integrity of location, design, workmanship, feeling, and association. The clusters of worker housing represent a significant collection of Early and Late Industrial residential architecture built in connection with industrial and commercial operations in the village. There are several examples that retain integrity of materials, which further recommend the area for eligibility. Although some important buildings have been demolished, the village currently displays a level of density commensurate with its appearance in the Early Industrial Period. The mills around which the houses were constructed have been removed, but there is potential to gain information through archaeological investigation. The village appears to meet criteria A and C of the National Register at the local level for its association with broad patterns of industrial history and its embodiment of distinctive characteristics of worker housing. Although it is composed of a variety of resource types, the area is a unified entity by virtue of its common in-



Massachusetts Bay Transportation Authority

VILLAGE OF CORDAVILLE

FIGURE 6.6-1

dustrial associations, its clearly defined periods of construction and the relatively small number of intrusions. All surveyed properties were present during the period of operation of the mills. Also, the vast majority of surveyed properties were built during the Early or Late Industrial periods, which contributes to the cohesive appearance of the neighborhood. New construction is limited to fewer than ten residences, which detract little from the historic associations of the area. The Volume II, Historic Properties Survey for the Right-of-Way of the Worcester Commuter Rail Extension, was submitted to the Massachusetts Historical Commission (MHC) in May 1996.

The potential impacts from the construction and operation of the commuter station are visual in nature. The pedestrian platforms and parking spaces for 420 commuters will result in a visual change within the Cordaville area. The use of appropriate landscaping will be effective in reducing any visual effects and should result in the enhancement of the area. Design features to promote passive and active recreational activities and the enjoyment of open space are part of the station plan.

6.7 Archaeological Resources

Station area archaeological potential builds on the studies performed for the entire railroad right-of-way, where overall sensitivity ratings were developed, each implying different cultural resource recommendations (see Appendix H in the March 1996 Final EIR).

The proposed Southborough station is located on the site of the Cordaville Mill, some of which is still visible east of the station location. The hazardous materials excavations, up to 12 feet deep, revealed a fill (including densely jumbled stone slabs) that included some late nineteenth- and twentieth-century artifacts, but did not reach the depth to expose intact mill structures. Construction of the Cordaville Mill and associated housing deeply and extensively disturbed the original landscape, and probably destroyed any prehistoric or earlier historic archaeological sites in the proposed station area. Consequently, the archaeological resources of the proposed station are probably limited to the mill and associated buildings themselves. The site evaluation process is in progress; historic research and site inspection have been completed; all investigations will be in accordance with the permit issued by the MHC. In accordance with the Memorandum of Agreement between the MBTA and the MHC, consultation to avoid, minimize or mitigate impacts to any significant archaeological resources will be

performed. The complete report, covering the Westborough, Southborough, and Ashland Station sites, is in progress.

6.8 Visual Impacts

The proposed station facilities will be designed to be compatible with the historic nature of Cordaville and the small town character of Southborough. Related off-site improvements include street and intersection improvements and new sidewalks. These improvements will not change the visual character of the area substantially.

Major visual features of the station include parking lots on both the north and south sides of the track and vertical elements such as the station platform canopy and light poles.

The parking lot on the north side of the railroad tracks will have a landscaped buffer area ranging from 5 to 10 feet in width between the paved area and Southville Road. There also will be additional landscaping between the parking lot and station platform.

The parking lot on the south side of the railroad tracks will be larger but set back about 380 feet from River Street. Because the south lot is further removed from and considerably lower in elevation than the residential areas of Cordaville, it will not be a dominating visual influence. The south side parking lot will have plantings in appropriate locations in order to soften the visual impact of a large area of asphalt.

The formerly proposed pedestrian overpass, connecting the platforms on either side of the tracks, would have been the dominant vertical element of the station. The community of Southborough expressed concern over the appearance of the pedestrian overpass described in the DEIR and proposed an underpass as an alternative. The MBTA, however, is reluctant to proceed with an underpass since MBTA policy is to avoid underpasses wherever possible for safety and security reasons. Incorporation of cross track pedestrian traffic now is proposed as part of the Route 85 bridge reconstruction. A wide sidewalk under the bridge (west side) will connect to the station platforms via stairs and ramps.

The in-bound (south side) platform will have a canopy to protect waiting commuters. It will be 150 feet in length and 15 feet in height.

The station and parking lots will be lighted from dusk to about one-half hour after the last scheduled commuter train will pass through the station in the evening. Photoelectric cells

will turn on the lights and a time clock will turn them off. High pressure sodium cut-off luminaires will be used for lighting. As opposed to the normal street lights, the cut-off luminaires direct the light downward with minimal spillover to off-site areas. The light source from a cut-off luminaire is not visible to a pedestrian unless standing under the light. Typically, the light poles are 30 feet in height, however the MBTA intends to utilize 20 foot high poles at this station. The lights should not be a visual disturbance to the adjoining Cordaville neighborhood or to residents in Hopkinton.

Current plans call for landscaping and pedestrian access to the Sudbury River and the small pond west of the south side parking lot. Fencing will be introduced to preclude reaching the pond from the north side of the tracks by pedestrian grade crossings of the track.

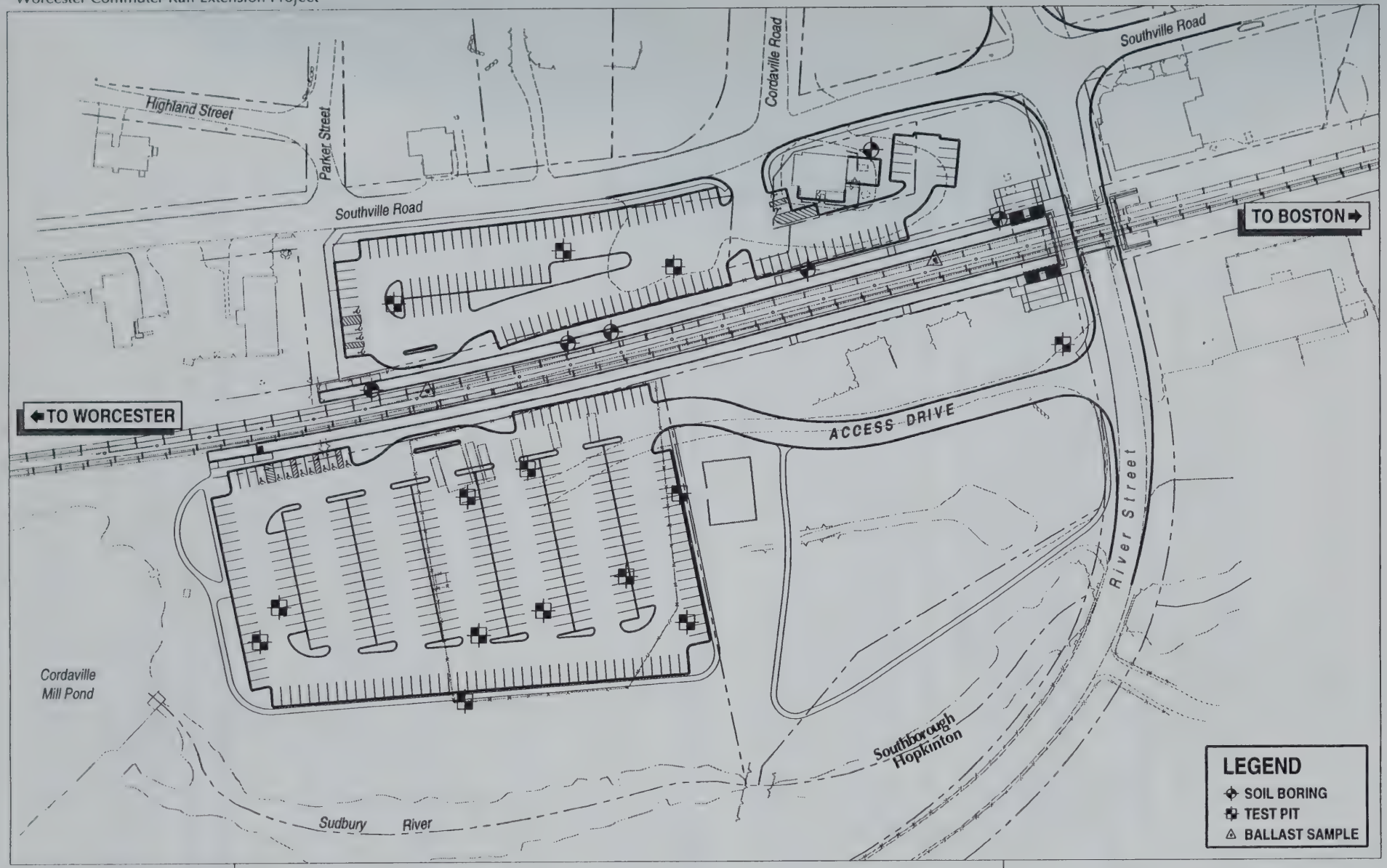
Three stone arch bridges of mid-to-late nineteenth-century design, still in their original settings, along with other site features and historic associations with former mill operations, offer a unique opportunity for creative interpretative design.

The proposed design, including the combination of station and off-site improvements, will create a visually distinguished area around the commuter rail station which will be compatible with its immediate surroundings, as well as the small town character of Southborough.

6.9 Hazardous Materials

An environmental site evaluation was performed for the proposed Southborough Station site, in order to identify any hazardous materials or oil that may be contained within the soils or groundwater at the site. The evaluation was conducted per the requirements of Massachusetts General Law, Chapter 21E. See Figure 6.9-1 for locations of test sites.

The environmental site evaluation included the following elements:



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 125'

0 125

SITE PLAN - HAZARDOUS MATERIALS INVESTIGATION (21E) SOUTHBOROUGH, MA

FIGURE 6.9-1

1. A review of the site's history, which confirmed that the southern portion of the site was occupied by the Cordaville Woolen Mill from approximately 1830 until the 1960s. The mill used dyes in the process of making blankets. The dyes and various associated chemicals were reportedly stored on site in unknown quantities.

2. A review of State and local records and information, which indicated no releases of hazardous material or oil at the site or within ¼ mile upgradient of the site, and no other drinking water supplies, public or private, within ¼ mile of the site, north of the Sudbury River.

3. A subsurface exploration program consisting of 5 soil borings and 11 test pits. No groundwater was encountered in 5 of the test pits. The soil boring and test pit logs are available at the MBTA project office. Soil samples were taken at each of the borings and test pits. Groundwater samples were taken at 4 of the test pits.

4. Soil and groundwater sample were analyzed in a laboratory by chemical screening methods.

The results of the environmental site evaluation indicate that although trace to low levels of volatile organic compounds and cadmium are present in the soil on the southern portion of the site, the levels of contaminations detected were well below the reportable concentrations contained in the Massachusetts Contingency Plan for soils in high environmental impact areas. Specifically, the results indicated the following:

- Screening for volatile organic compounds (VOCs) indicated the presence of benzene, toluene, and acetone at concentrations below the method detection limit of 5 parts per billion in one of the soil samples. Further VOC analyses did not confirm the presence of VOCs. In addition, no petroleum hydrocarbons were detected in that sample or any other sample.

- Priority pollutant metals analyses from 2 soil samples (taken at locations downgradient of the former sluiceway) did not detect contamination of metals above normal background levels.

- No VOCs were detected in any of the four groundwater samples. Analyses of pH and specific conductance in the groundwater samples indicated typical readings for New England groundwater.

- Neither polychlorinated biphenyl nor petroleum hydrocarbons were detected in the composite ballast sample collected from the railroad bed.

6.10 Pedestrian Safety

The CTPS ridership projections do not forecast any patrons walking to the Southborough Station; however, its location near residential areas and the proximity of the convenience store make pedestrian activity likely. A sidewalk is proposed to be constructed from the station easterly on the south side of Southville Road to River Street, then southerly along the west side of River Street to meet the station parking access road sidewalk south of the railroad tracks. Based on recent meetings with town officials, other proposed sidewalks in the immediate area, although not considered as mitigation per se for station impacts, include the following:

- From the south side parking lot, overland to the intersection of Route 85 and Lincoln Street and continuing to the entrance of the Hopkinton State Park.
- From the Southville Road/River Street (Route 85) intersection northerly to Woodland Road, then continuing about 2,000 feet along Woodland Road and about 1,500 feet along Route 85 to Richards Road.
- From the Southville Road/River Street (Route 85) intersection easterly along Southville Road for a distance of about 2,800 feet.

These sidewalks will serve as an amenity for local residents and for MBTA patrons.

6.11 Construction

Construction related impacts typically involve issues of traffic to and from the work site, air quality, noise and vibration, erosion and sedimentation, and safety. Construction will take approximately 4 to 6 months. Station site work will involve clearing, excavation, foundation construction, paving, and installing/erection of site facilities such as station platforms and station canopies. Construction equipment likely to be used includes graders, bulldozers, backhoes, cranes, and trucks.

Construction related traffic impacts are not expected to be significant. During certain short-term phases of construction, there will be concentrated deliveries of materials, such as during paving of the parking areas. Station construction will not be particularly labor-

intensive, either, and traffic generated by the labor force will not adversely affect level of service on nearby roads.

There will be short-term, intermittent increases in air emissions from construction equipment and site-related construction traffic. No violations of air quality standards are anticipated.

Water will be sprayed on exposed earth surfaces to control fugitive dust from construction vehicle traffic or from wind erosion.

Silt barriers, consisting of hay bales and silt fence, will help trap sediments from construction site runoff. Limiting the area of earth exposed at any one time will help minimize both wind and water erosion. Compliance with the requirements of an order-of-conditions issued by the Southborough Conservation Commission will ensure that any potential adverse effects on water quality and resource areas are minimized.

Potential construction noise and vibration impacts and possible mitigation are described in the preceding Section 6.3.

Station site construction activities that present a potential safety concern will be secured by temporary fencing or other barriers. The contractor will be required to adhere to all pertinent regulations regarding use and storage of hazardous or toxic materials on the site.

6.12 Proposed Mitigation

The streets and intersections within the Southborough study area were reviewed to identify those locations that may require mitigation in accordance with the MBTA Mitigation Policy outlined in Section 2.8. The intersections which meet the outlined criteria are discussed below.

The intersection of Cordaville Road and Main Street will deteriorate from LOS E "No Build" to LOS F "Build" in the year 2001 A.M. peak generator hour. A review of turning movement data indicates moderate left turn volumes in the peak hours, particularly on the northbound and westbound approaches. To improve overall operating efficiency of the intersection, exclusive left turn lanes, improved turning radii, and a new traffic control signal could be constructed.

Impacts associated with making improvements either to Route 85 only or to the entire intersection include land acquisition, grading impacts, tree removal and drainage impacts. Land acquisition costs may significantly increase the total cost of improving the entire intersection as opposed to making short term improvements to Route 85. The recent mitigation meetings with the Town indicate that any mitigation which would alter the local character of the town center intersection would be undesirable. At present, various roadway construction projects in Southborough on Routes 30 and 85 have temporary effects on traffic circulation. The MBTA will monitor the Route 30/Route 85 intersection after the commuter rail station has been open and local traffic has stabilized and adjust the signal timing to improve the traffic operations.

The unsignalized intersection of Cordaville Road and River Street will experience a reduction in level of service from LOS E to LOS F in the 1996 A.M. peak hour. A recent mitigation meeting with the Town resulted in an agreement to close Cordaville Road at its intersection with River Street, eliminate this intersection and divert traffic through the proposed signalized intersection at River Street and Southville Road. This section of Cordaville Road between River Street and Southville Road will serve local traffic only.

Two analyses were conducted to determine the effects of the additional traffic at the River Street/Southville Road intersection. The first analysis assumed no improvements in geometry or signal phasing at the intersection. The second analysis assumed the addition of exclusive turning lanes on each approach with new fully actuated traffic signal and improved turning radii.

Without mitigation, the additional traffic diverted off Cordaville Road causes the intersection to operate at LOS F in the A.M. peak hour and P.M. peak hour.

Proposed mitigation at the intersection of River Street and Southville Road consists of the following:

- Widening of River Street and Southville Road to provide exclusive left turn lanes and improve the turning radii to accommodate WB-50 trucks.
- Install new fully actuated traffic control signal system which will improve the operation of the intersection and reduce delay and environmental impacts.
- Provide new pavement marking and signing, including advance warning to approaching traffic if sight distance is a problem.
- Close Cordaville Road and divert traffic through Southville Road intersection.

- Land acquisition, grading and drainage, and landscaping.

Additional construction will be at the station driveways; River Street driveway, and Southville Road Driveway. Both driveways will be unsignalized and will operate at acceptable levels of service.

The cost of roadway reconstruction and new traffic signal installation is estimated to be approximately $500,000, exclusive of right-of-way costs.

The proposed mitigation will improve the intersection operation to acceptable level of service B in the peak hours. Tables 6.12 and 6.12-2 show a LOS comparison of "Build" traffic volumes without mitigation and with mitigation for the peak hours and peak generator hours.

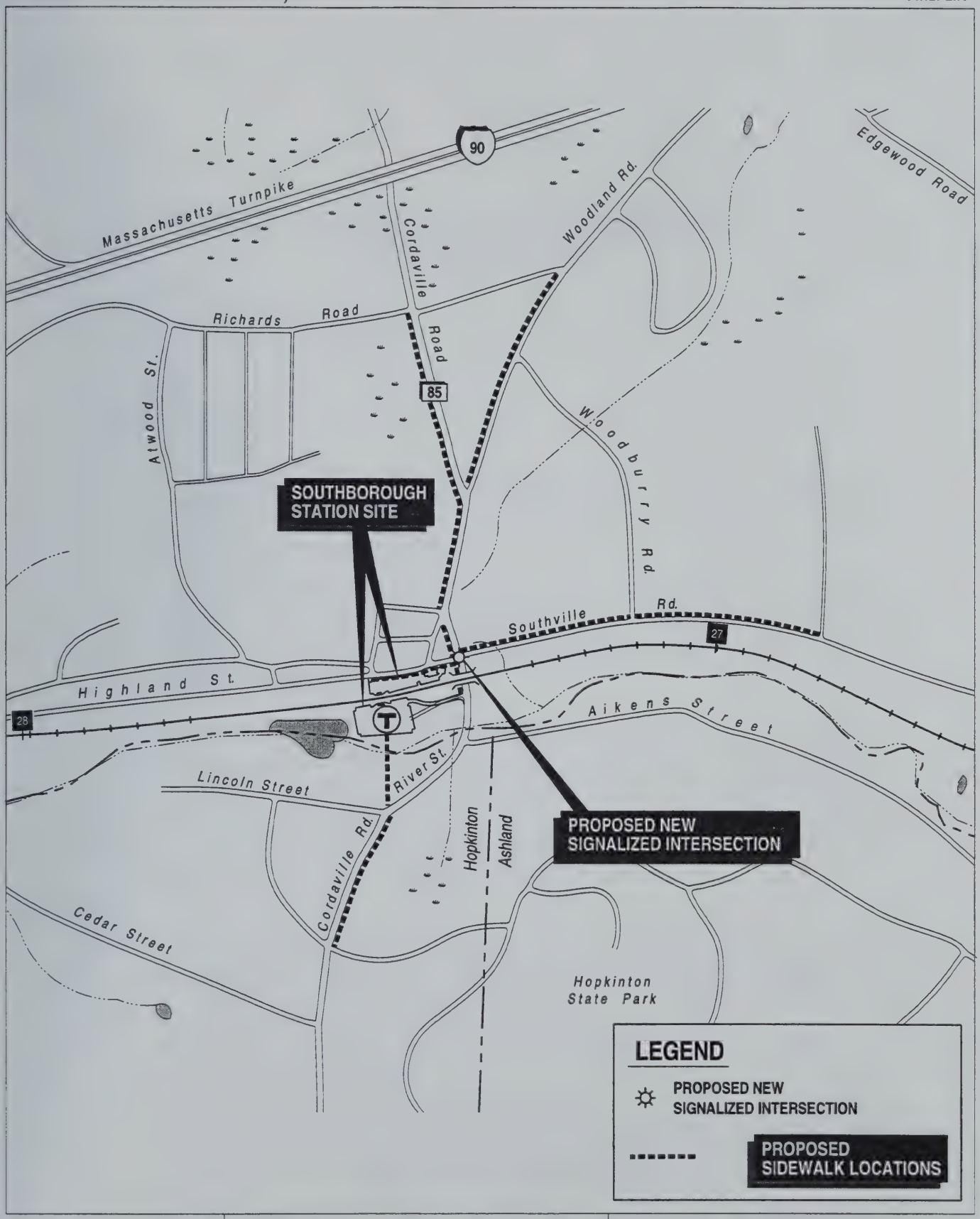
Table 6.12-1 2001 Peak Hour Signalized Intersection Level of Service

Southborough	A.M.		P.M.	
	w/o Mitigation	w/Mitigation	w/o Mitigation	w/Mitigation
River and Southville	F	B	F	B
Eastbound	D	C	C	D
Westbound	C	C	C	D
Northbound	F	B	D	B
Southbound	F	B	F	B

Table 6.12-2 2001 Peak Generator Hour Signalized Intersection Level of Service

Southborough	A.M.		P.M.	
	w/o Mitigation	w/Mitigation	w/o Mitigation	w/Mitigation
River and Southville	F	B	C	B
Eastbound	C	C	E	C
Westbound	C	C	C	C
Northbound	E	B	B	B
Southbound	F	B	D	B

Pedestrian safety and convenience will be accommodated by installing sidewalks as outlined in Section 6.10. Approximately 9,500 feet of new sidewalks will be constructed (see figure 6.12-1) at an estimated cost of $145,000, exclusive of any right-of-way costs.



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 1000'

0 1000

SOUTHBOROUGH STATION MITIGATION PLAN

FIGURE 6.12-1

SECTION 7.0 ENVIRONMENTAL IMPACTS—ASHLAND STATION

Introduction

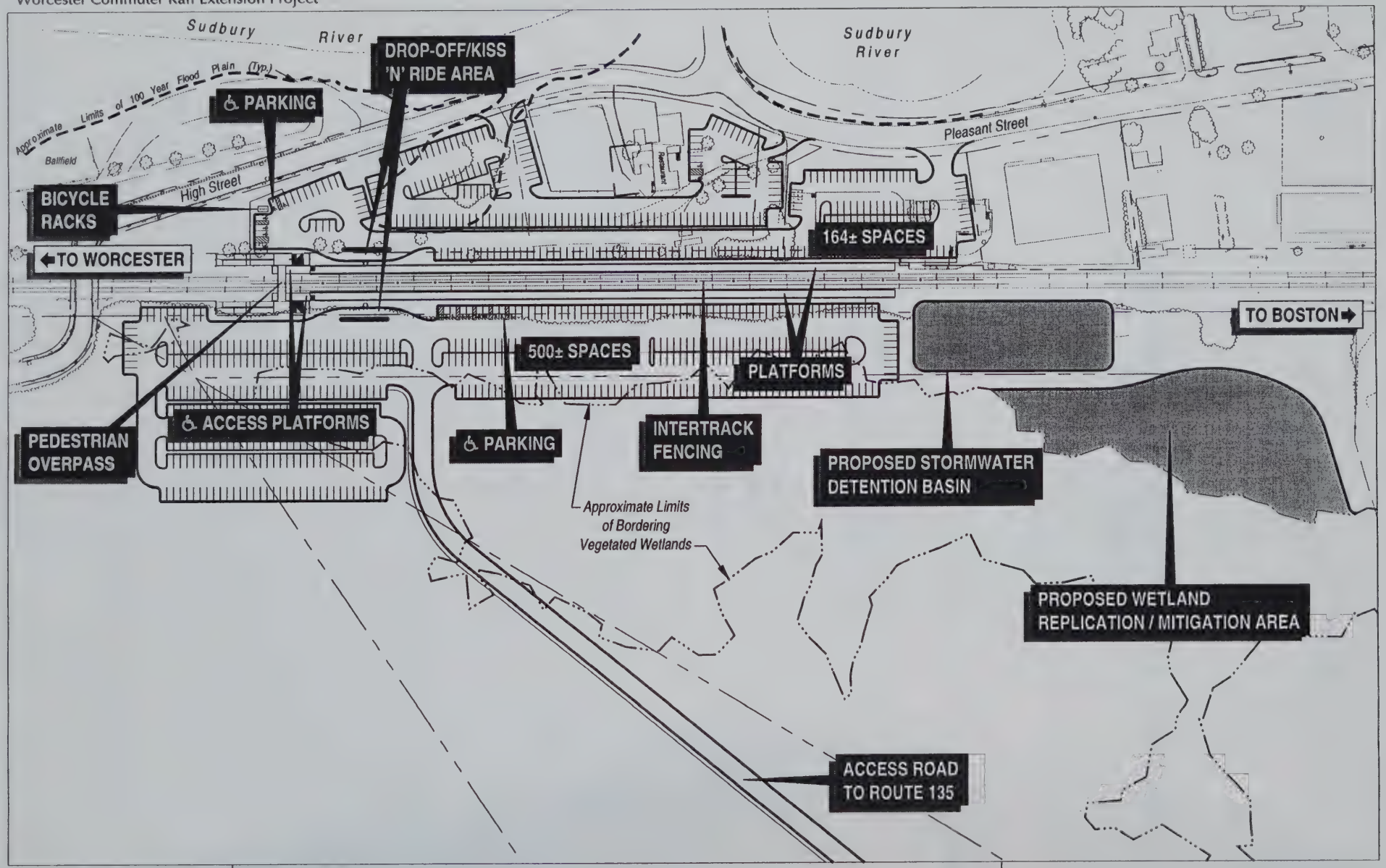
The Draft EIR evaluated potential environmental effects of two station sites in Ashland. Both proposed parking for 700 vehicles, with parking divided between lots north and south of the railroad tracks.

The Ashland Station-East alternative would provide parking north of the railroad tracks adjacent to the Latter Rain Church on Pleasant Street and south of the railroad tracks on Megunko Road. A new 3,000-foot-long access road would be constructed to connect the south side parking to Route 135.

The Megunko Road parking lot abuts the Nyanza Superfund site and lies within the site's groundwater plume. Meetings and discussions have been held between the MBTA, the DEP, and the U.S. Environmental Protection Agency to address concerns relating to use of the Megunko Road property for commuter rail facilities. Subsequent to the filing of the Draft EIR, considerable controversy surfaced regarding development of the east alternative. Among the controversial issues and impacts raised were:

- Displacement of up to 14 businesses and up to 60 jobs.
- No alternative sites in the town to which most of these business could relocate.
- Construction would disrupt the EPA's Phase II groundwater treatment program.
- Construction would also disrupt the EPA's Phase III cleanup program. The access road to the site would be closed during this Phase III operation.
- The EPA has identified a portion of the site as an alternative location for their groundwater treatment plant.
- Construction would disrupt contaminated soils and groundwater.
- Upon purchasing this land, the MBTA would become a "Potentially Responsible Party" (PRP) and may be subject to sharing in the clean-up costs of the Nyanza site.
- MBTA seeks to avoid purchasing contaminated sites whenever possible.

Based upon these issues and upon a formal letter issued by the Town to the MBTA, the MBTA is proceeding with the west alternative.



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 175'
0 175

SITE PLAN
ASHLAND STATION

FIGURE 7.0-1

The Ashland Station-West alternative, reconfigured since the DEIR to reduce wetlands alteration, would construct north side parking for 200 cars with the access drive on Pleasant Street and south side parking for 500 cars west of the Nyanza site and accessed by a new 4,000-foot-long roadway connecting to Route 135. The station site plan shows 164 parking spaces on the north side; at least 36 additional spaces will be available at the restaurant immediately adjacent to the station. The south side parking would displace less than one acre of wetlands. The site plan is shown on Figure 7.0-1.

The Ashland Station is projected to attract 770 patrons in 1996, with daily ridership increasing to 1,085 by the year 2011.

The traffic analysis revealed that most of the streets and intersections studied in Ashland are currently operating well. The addition of the proposed northerly and southerly commuter rail lots would attract a projected ridership of 856 patrons by the year 2001, while impacting only two signalized intersections south of the railroad on Union Street. The Main Street/Union Street and Union Street/Summer Street intersections would be burdened by the additional traffic during A.M. and P.M. peak hours. Even without the proposed commuter rail station, these two intersections are projected to have serious congestion problems within five years due to background growth, particularly during morning peak hours. Optimization of the signal timings at these intersections would improve the level of service. Construction of the commuter rail facility will have a positive impact on other routes through Ashland, particularly Route 135, Route 126, Main Street through the center of town, and the Massachusetts Turnpike, by removing a portion of the peak hour traffic from these roads.

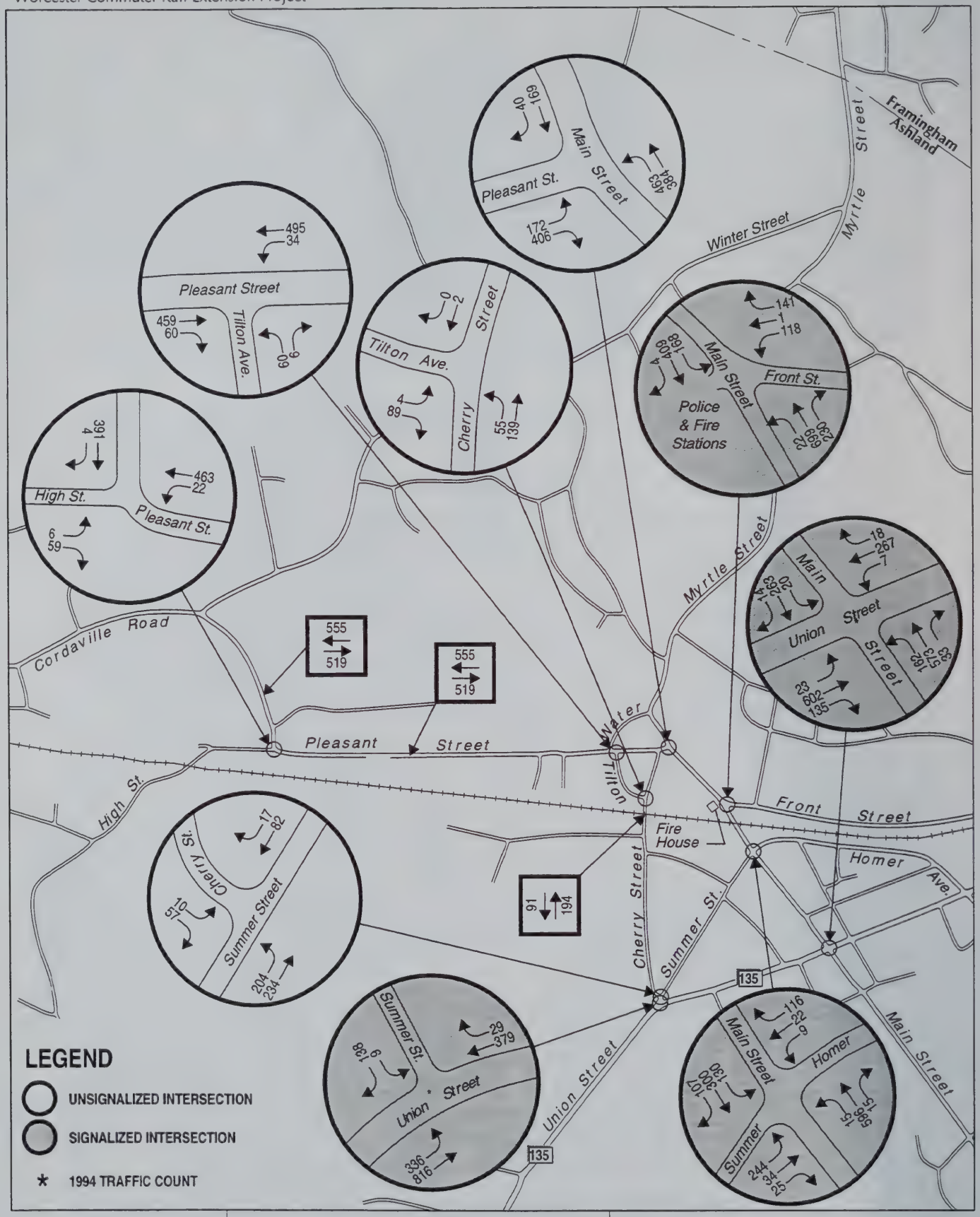
The north side parking would displace a one story wood frame commercial building.

7.1 Local Traffic

This section provides a summary of the complete traffic analysis included in the November 1994 DEIR Appendix- Volume I. It summarizes existing traffic conditions in Ashland, projected ridership for the Ashland Station, and the impact of that ridership on area streets and intersections.

Ridership projections for each proposed station were prepared by the Central Transportation Planning Staff (CTPS) in May 1994, and form the basis for traffic impact analyses used in the November 1994 DEIR. Ridership projections were updated by CTPS in January 1996. For Ashland Station, the updated ridership increased slightly, from 738 to 770 patrons, with minor adjustments in town of origin. When the updated ridership is redistributed to the trip network and traffic hours of concern, the net effect on levels of service analyses performed for the Draft EIR is negligible.

The traffic impact assessment prepared for the Ashland Station focused on the streets and intersections in the ENF Certificate of the Secretary of Environmental Affairs. Figures 7.1-1 (A.M. Peak Hour) and 7.1-2 (P.M. Peak Hour) show the location of the streets and intersections that were analyzed as part of the study.



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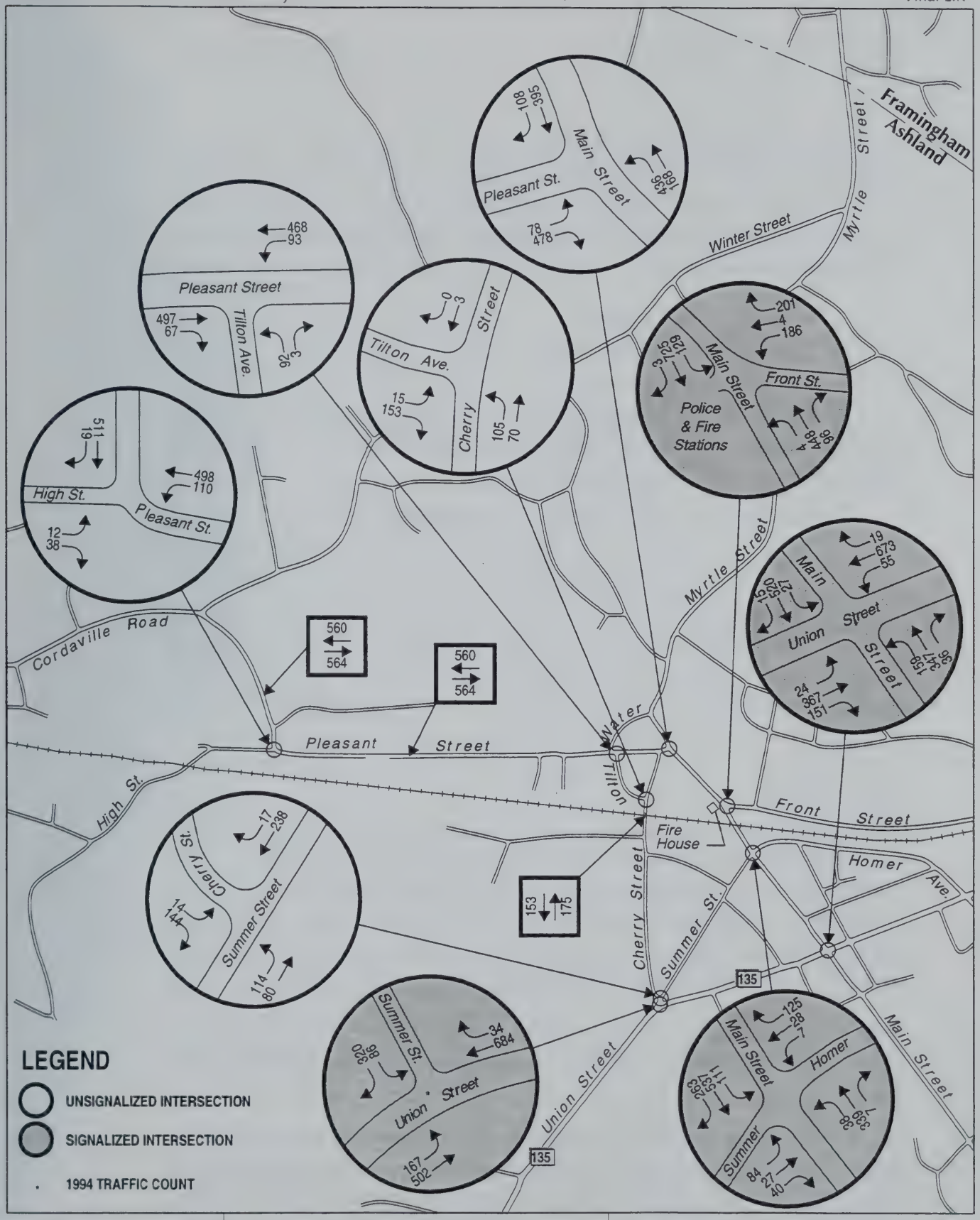
Approx. Scale: 1" = 1250±

0 1250

A.M. Peak Hour
7:30 - 8:30 A.M.
1992 Existing Conditions
ASHLAND STATION

FIGURE 7.1-1



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 1250±

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P.M. Peak Hour
5:00 - 6:00 P.M.
1992 Existing Conditions
ASHLAND STATION

FIGURE 7.1-2

Analysis of the streets and intersections was performed for the existing conditions and the "No Build" and "Build" conditions for the years 1996 and 2001. A level of service (LOS) was calculated for each street segment and intersection. A discussion of the LOS rating system is presented in Section 1.3 of the November 1994 DEIR. A summary of the LOS designations is as follows:

Rating	Judgment
A	Little or no delay
B	Short traffic delays
C	Average traffic delays
D	Longer than average delays
E	Very long traffic delays
F	Severe congestion, demand exceeds capacity

The results of the LOS analysis are presented for the A.M. and P.M. peak hours as well as the A.M. and P.M. peak generator hours. The A.M. and P.M. peak hours are those periods when traffic conditions are heaviest. The A.M. and P.M. peak generator hours are those periods when usage of the rail station is heaviest. Traffic count data showed that the A.M. and P.M. peak hours in Ashland are from 7:30 to 8:30 A.M. and 5:00 to 6:00 P.M., respectively. The A.M. and P.M. peak generator hours are from 7:15 to 8:15 A.M. and 5:30 to 6:30 P.M., respectively.

Existing Conditions

Existing conditions were determined by traffic counts and intersection turning movement counts conducted from the Fall of 1992 to the Summer of 1994. The results of the counts were used to calculate existing condition levels of service for each of the intersections and street segments studied. Figures 7.1-1 and 7.1-2 show existing A.M. and P.M. peak hour volumes within the study area. Figure 7.1-3 shows existing Average Daily Traffic (ADT) and Average Weekday Traffic (AWDT) for roads within the study area.

Table 7.1-1 shows the signalized intersection levels of service and Table 7.1-2 shows the unsignalized intersection levels of service. Roadway segment levels of service are shown in Table 7.1-3.

As Table 7.1-1 indicates, the intersection of Union Street and Summer Street is functioning at LOS F during both the peak hours and the peak generator hours. The three other signalized intersections operate acceptably during the peak hours and peak generator hours, although the Main Street/Union Street intersection is at LOS E in the A.M. peak hour and the A.M. generator hour. As shown, several individual approaches are at LOS F during certain peak periods.

A review of Table 7.1-2 shows that generally the unsignalized intersections are functioning satisfactorily. Only the left turn movement from Pleasant Street to Main Street is operating at LOS F. This occurs in the A.M. peak hour and A.M. peak generator hour. This same movement is at LOS E in the P.M. peak hour and peak generator hour, while the left turn movement from Pleasant Street to Tilton Avenue is at LOS E in the P.M. peak hour.

Table 7.1-3 shows that all the analyzed road segments are operating acceptably in the peak hours and peak generator hours.

Table 7.1-1 1992 Existing Signalized Intersection Level of Service

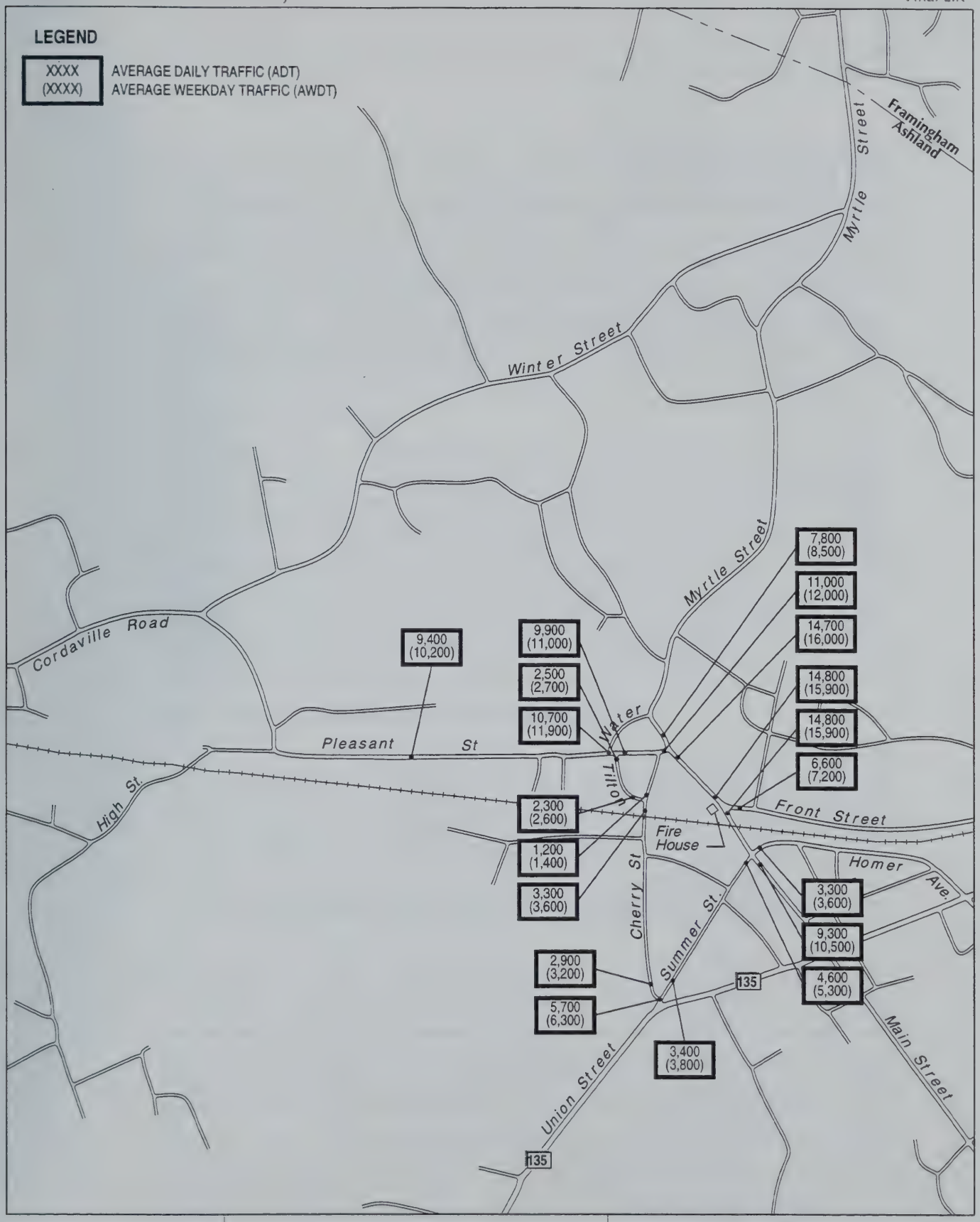
Ashland	Peak Hour		Peak Generator Hour	
	A.M.	P.M.	A.M.	P.M.
Main and Front	D	D	D	C
Westbound	C	D	C	D
Northbound	E	C	E	B
Southbound	B	E	B	D
Main and Summer	D	B	D	B
Eastbound	F	C	F	C
Westbound	C	C	C	C
Northbound	B	B	B	B
Southbound	E	B	D	C
Main with Union	E	D	E	C
Eastbound	F	C	F	C
Westbound	B	E	B	D
Northbound	C	B	C	B
Southbound	B	C	B	B
Union with Summer	F	F	F	F
Eastbound	F	B	F	B
Westbound	F	F	F	F
Southbound	B	F	B	E

Table 7.1-2 1992 Existing Unsignalized Intersection Level of Service

Ashland	Peak Hour		Peak Generator Hour	
	A.M.	P.M.	A.M.	P.M.
Pleasant with High				
LT from WB Pleasant	A	A	A	A
LT and RT from High	B	D	B	D
Pleasant with Tilton				
LT from WB Pleasant	A	A	A	A
LT from Pleasant	D	E	D	D
Main with Pleasant				
LT from NB Main	A	B	A	A
LT from Pleasant	F	E	F	E
RT from Pleasant	A	D	A	C
Cherry with Tilton				
LT from NB Cherry	A	A	A	A
LT and RT from Tilton	A	A	A	A
Summer with Cherry				
LT from EB Summer	A	A	A	A
LT and RT from SB Cherry	A	A	A	A
THRU and RT from SB Summer	A	B	A	A

Table 7.1-3 1992 Existing Road Segment Level of Service

Ashland	Peak Hour		Peak Generator Hour	
	A.M.	P.M.	A.M.	P.M.
Cordaville Road West of Site	E	E	E	D
Pleasant Street East of Site	D	D	D	D
Cherry Street at Railroad Grade Crossing	C	C	C	C



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 1250'±

0 1250

1992 Average Daily Traffic & 1992 Average Weekday Traffic
ASHLAND, MA

FIGURE 7.1-3

Safety Concerns and Accident History

The Ashland Police Department was contacted on July 28, 1994, to determine the existence and location of any safety concerns or high accident history intersections. According to Lieutenant Doveno, two locations are considered to be possible high frequency accident locations, both involving railroad grade crossings. These are the grade crossing at Main Street and the grade crossing at Cherry Street. Concern was expressed about the possibility of increased traffic on the High Street and Fountain Street bridges due to additional drivers using these roads as alternate routes to avoid delays on Main Street in the center of town.

Rail Ridership Projections Without Constrained Parking

Projections of rail ridership on each of the proposed stations of the Worcester Extension Project were prepared by the Central Transportation Planning Staff (CTPS) in May, 1994 and revised in January 1996. The revised ridership projections were included in Appendix D of the March 1996 FEIR. CTPS projected that in 1996, without parking constraints, the Ashland Station would attract a total of 770 daily round trip commuters. Twenty of these patrons would walk to the station and 62 are projected to be dropped off. The remaining 688 patrons will drive to and park at the station. Based on a vehicle occupancy rate of 1.12, the Park'n'Ride patrons would result in a demand for 614 parking spaces.

The patrons of the Ashland Station are projected to originate from the towns of Ashland, Holliston, Hopkinton, Southborough, and Marlborough. Table 7.1-4 shows the town of origin for the projected Ashland Station riders when station parking is unconstrained.

Table 7.1-4 Town of Origin Ashland Station Projected Ridership - Year 1996

TOWN	RIDERS
Ashland	377*
Holliston	279
Hopkinton	56
Southborough	23
Marlborough	35
TOTAL	770

* *Includes 20 walk trips from Ashland*

The impact of the commuter rail riders on area streets as they travel to and from the Ashland Station is determined by assigning those commuters to a particular route in the study area. Routing was selected based on the shortest travel time and/or distance from population centers. Riders who live in Ashland would use a variety of travel routes depending on the location of their residence. Commuters from Southborough and Marlborough would access the north side parking from Cordaville Road. Commuters from Holliston and Hopkinton would access the south side parking traveling Route 135 and Main Street. Figure 7.1-4 shows the projected distribution of traffic for the station when station parking is unconstrained.

Assignment of Riders to Trains

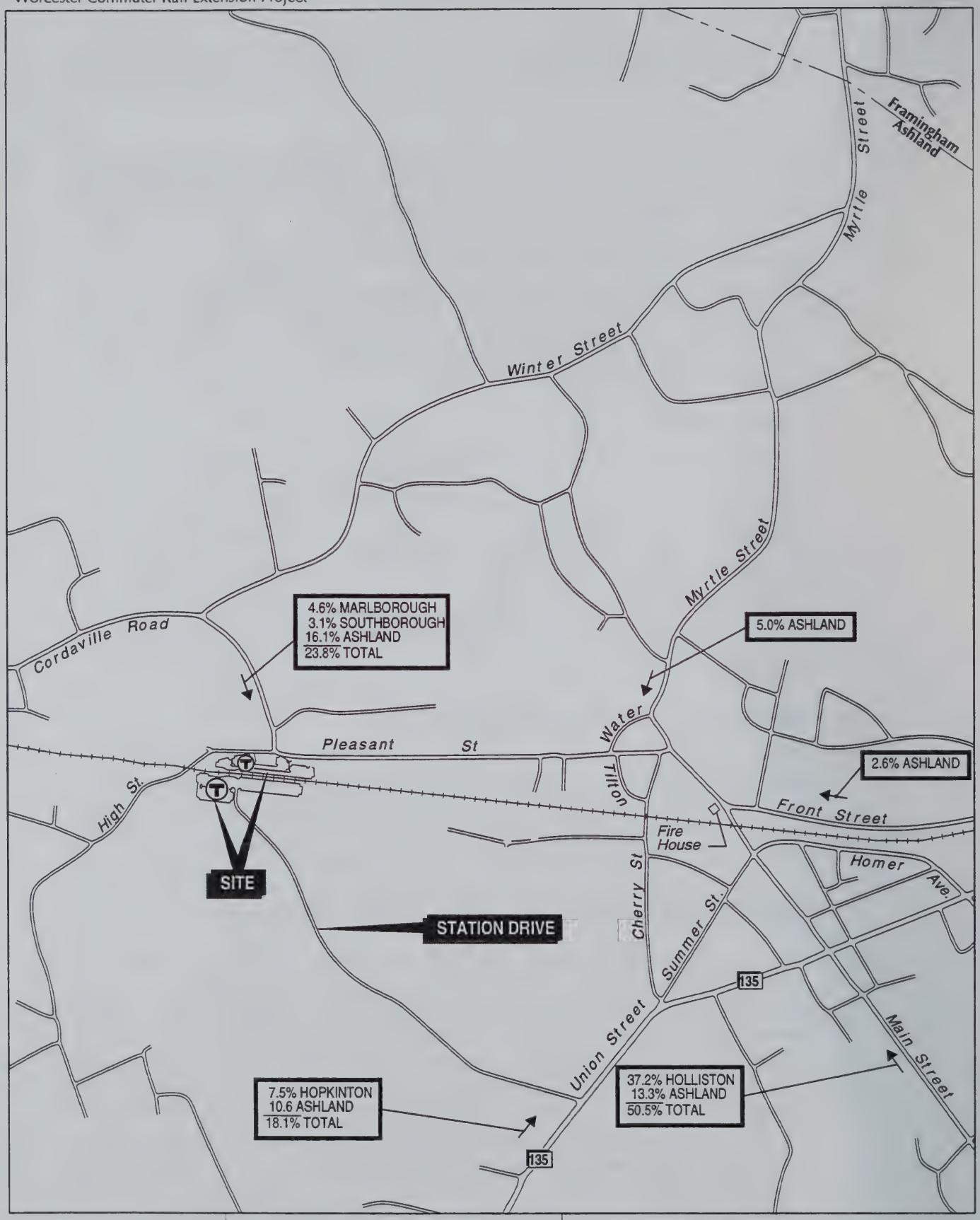
Ashland station patrons would arrive at the station to board one of four A.M. peak period trains and would leave the station after arrival on one of the five scheduled P.M. peak period trains. The distribution of riders to each train was determined by use of an equation based on observed arrival and departure data from several MBTA commuter rail lines. The observations of distribution by trains tend to show the greatest number of riders on the trains that arrive at Boston close to 8:30 A.M. Trains arriving earlier and trains getting to Boston after 9:00 A.M. tend to attract fewer riders. In the evening peak, observations show the greater ridership in the middle of what is normally considered the peak commuting period.

1996 Traffic Impacts with Unconstrained Ashland Parking

The 1996 traffic impacts consider background growth of traffic in addition to existing traffic volumes and the new trips generated by the station with unconstrained parking. Background growth is determined by tracking historical growth rates of permanent count locations. Data from permanent count locations in the Ashland area revealed variation in traffic growth including some decreases in traffic volumes. For the purpose of this report, 0.5% annual growth of traffic volumes has been used for projection from 1992 to 1996.

Traffic impacts of both "No Build" and "Build" alternatives were analyzed. Presentation of the 1996 "No Build" and "Build" alternatives allow an assessment of the impacts resulting from building the commuter rail station. The "Build" alternative, which assumes unconstrained parking, did not assume any redistribution of existing traffic on local roads. In other words, the commuters driving to the rail station were considered to be new trips. In actuality, many of those who would drive to the station are already on the road. Their trip will be shortened by driving to the station. In some cases, they are already driving on the same roads to access Route 9, for example, as they would to go to the new station. The "Build" analysis, therefore, does some double counting of vehicles and tends to be a worst case analysis.

The peak hour and peak generator hour overlap by 45 minutes in the A.M. period and 30 minutes in the P.M. peak period. In order to determine the greatest impact to area roadways, both the peak hours and peak generator hours were analyzed.



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 1250'±

0 1250

Distribution of Commuter Rail Station Traffic
1996 BUILD ALL STATIONS
ASHLAND STATION Unconstrained Parking

FIGURE 7.1-4

Tables 7.1-5 through 7.1-8 present the results of the level of service analysis for the signalized and unsignalized intersections. The tables reflect both the "No Build" and the "Build" conditions.

The intersection of Main Street and Front Street will operate acceptably for all peak periods in the "No Build" and "Build" conditions. The intersection level of service could be improved in the "Build" condition by properly timing the signal to correspond with actual traffic demands. The remaining intersections generally operate poorly in the "No Build" condition, with Main Street/Union Street at LOS F in the A.M. peak hour and peak generator hour and Union Street/Summer Street at LOS F during all peak periods. The level of service at Main Street/Union Street will marginally improve in the "Build" condition to LOS E or better by properly timing the signal. Again, with proper signal timing the Union Street/Summer Street intersection can operate at acceptable levels in the A.M. "Build" condition. During the P.M. peak hour and peak generator hour the intersection will continue to experience failure conditions. The intersection of Main Street and Summer Street will have a minor reduction in level of service in the A.M. generator hour "Build" condition.

A review of Tables 7.1-7 and 7.1-8 shows that most movements of unsignalized intersections operate at acceptable levels of service under both the 1996 "No Build" and "Build" conditions. As in the existing condition, the left turn movement from Pleasant Street to Main Street is at LOS F. This occurs in both the "No Build" and "Build" conditions for all but the P.M. peak generator hour. In terms of reserve capacity, there is little or no effect. Additionally, in the P.M. peak hour and peak generator hour "Build" condition the left turn movement from the proposed southerly station driveway to Union Street will function at LOS F. A minor reduction in level of service will occur in the P.M. generator "Build" condition for traffic turning right from Pleasant Street to Main Street.

Tables 7.1-9 and 7.1-10 show that the level of service at road segments will not decrease due to station traffic and will operate acceptably under both the 1996 "No Build" and "Build" conditions.

In the 1996 peak hours and peak generator hours, the intersection of Pleasant Street and the Station Driveway will operate satisfactorily in both the "No Build" and "Build" conditions. Traffic turning from High Street to Pleasant Street will experience a reduction in level of service from LOS B to LOS C in the A.M. peak periods and from LOS D to LOS E in the P.M. peak periods. In the year 2001, the turning movement from High Street to Pleasant Street is expected to deteriorate to LOS F in the P.M. peak periods "Build" condition. The level of service in the A.M. peak periods will remain at an acceptable LOS C in the "Build" condition.

Table 7.1-5 1996 Signalized Intersection Level of Service - A.M. Peak Hours

Ashland	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Main with Front	D	B	D	B
Westbound	C	D	C	D
Northbound	E	B	E	B
Southbound	B	A	B	A
Main with Summer	E	E	D	E
Eastbound	F	F	F	F
Westbound	C	C	C	C
Northbound	B	B	B	C
Southbound	F	F	D	E
Main with Union	F	D	F	E
Eastbound	F	D	F	E
Westbound	B	B	B	B
Northbound	C	E	C	E
Southbound	B	B	B	B
Union with Summer	D	D	E	E
Eastbound	E	E	E	E
Westbound	B	B	B	B
Southbound	C	C	C	C

Table 7.1-6 1996 Signalized Intersection Level of Service - P.M. Peak Hours

Ashland	P.M. Peak Hour		P.M. Peak Generator Hours	
	No Build	Build	No Build	Build
Main with Front	D	C	D	C
Westbound	D	E	D	E
Northbound	C	A	B	A
Southbound	E	C	D	B
Main with Summer	B	B	C	B
Eastbound	C	C	C	D
Westbound	C	C	C	C
Northbound	B	A	B	A
Southbound	B	B	C	B
Main with Union	D	E	C	E
Eastbound	C	E	C	F
Westbound	E	E	D	D
Northbound	B	E	B	E
Southbound	C	C	B	D
Union with Summer	D	D	C	C
Eastbound	B	B	B	B
Westbound	B	B	B	C
Southbound	F	F	F	F

Table 7.1-7 1996 Unsignalized Intersection Level of Service - A.M. Peak Hours

Ashland	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Pleasant with High				
LT from WB Pleasant	A	A	A	A
LT and RT from High	B	B	B	C
Pleasant with Site's DW				
LT from WB Pleasant	-	A	-	A
LT from Parking Lot	-	D	-	D
RT from Parking Lot	-	A	-	A
Pleasant with Tilton				
LT from WB Pleasant	A	A	A	A
LT and RT from Tilton	E	E	D	D
Main with Pleasant				
LT from NB Main	A	A	A	A
LT from Pleasant	F	F	F	F
RT from Pleasant	A	A	A	A
Cherry with Tilton				
LT from NB Cherry	A	A	A	A
LT and RT from Tilton	A	A	A	A
Summer with Cherry				
LT from EB Summer	A	A	A	A
LT and RT from SB Cherry	A	A	A	A
THRU and RT from WB Summer	A	A	A	A
Union with Site's South DW				
LT from EB Union	-	A	-	A
LT from Parking Lot	-	E	-	E
RT from Parking Lot	-	A	-	A

Table 7.1-8 1996 Unsignalized Intersection Level of Service - P.M. Peak Hours

Ashland	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Pleasant with High				
LT from WB Pleasant	A	A	A	A
LT and RT from High	D	D	D	D
Pleasant with Site's DW				
LT from WB Pleasant	-	A	-	A
LT from Parking Lot	-	E	-	D
RT from Parking Lot	-	A	-	A
Pleasant with Tilton				
LT from WB Pleasant	A	A	A	A
LT and RT from Tilton	E	E	E	E
Main with Pleasant				
LT from NB Main	B	B	A	A
LT from Pleasant	F	F	E	E
RT from Pleasant	D	D	C	D
Cherry with Tilton				
LT from NB Cherry	A	A	A	A
LT and RT from Tilton	A	A	A	A
Summer with Cherry				
LT from EB Summer	A	A	A	A
LT and RT from SB Cherry	A	A	A	A
THRU and RT from WB Summer	B	B	A	A
Union with Site's South DW				
LT from EB Union	-	B	-	B
LT from Parking Lot	-	F	-	F
RT from Parking Lot	-	C	-	C

Table 7.1-9 1996 Road Segment Level of Service - A.M. Peak Hours				
Ashland	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Cordaville Road West of Site	E	E	E	E
Pleasant Street East of Site	D	D	D	D
Cherry Street at Railroad Crossing	C	C	C	C

Table 7.1-10 1996 Road Segment Level of Service - P.M. Peak Hours				
Ashland	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Cordaville Road West of Site	E	E	D	E
Pleasant Street East of Site	D	D	D	D
Cherry Street at Railroad Crossing	C	D	C	C

2001 Traffic Impacts with Unconstrained Ashland Parking

The level of service analysis for the Ashland Study area is again presented for the year 2001 "No Build" and "Build" conditions. To account for normal background traffic growth, an annual growth factor of 1.5% was applied to the 1996 traffic volumes to develop 2001 "No Build" volumes. Proposed ridership projections were used to develop the "Build" condition volumes, which assume unconstrained Ashland parking.

CTPS projected that in the year 2001, the Ashland Station is expected to attract 856 daily round trip commuters. Twenty of these patrons are expected to walk to the station while 68 would be dropped off at the station. The remaining 768 riders would be Park'n'Ride patrons. Projected traffic distribution would be as shown in Figure 7.1-4.

An LOS analysis was conducted for the "No Build" and "Build" conditions in both the peak hours and peak generator hours.

Tables 7.1-11 though 7.1-14 present the results of the analysis for the signalized and unsignalized intersections.

As in the previous analyses, the Main Street/Front Street intersection, while operating poorly in the "No Build" condition, can be improved in the "Build" condition by proper timing. Under the "No Build" condition in the A.M. peak periods, the remaining signalized intersections deteriorate to LOS F due to normal background traffic growth.

In the "Build" condition A.M. peak periods, minor improvements in level of service at the Main Street/Union Street and Union Street/Summer Street intersections can be realized with optimized signal timing. The Main Street/Summer Street intersection will continue to function at LOS F in the A.M. "Build" condition. The Main Street/Union Street intersection will deteriorate to LOS F in the P.M. peak period "Build" condition, while Union Street/Summer Street will operate at LOS F in both the "No Build" and "Build" P.M. peak periods.

The unsignalized intersections shown in Tables 7.1-13 and 7.1-14 generally operate at acceptable levels in both the "No Build" and "Build" conditions. Several movements will experience some reduction in level of service in the "Build" condition. As in the 1996 analysis, the left turn movement from Pleasant Street to Main Street is at or near failure under both "No Build" and "Build" conditions, as is the left turn from the southerly site driveway to Union Street. At the station driveway at Route 135, traffic volumes are low for the A.M. conditions. For the P.M. conditions, mitigation is proposed (see Section 7.12). Also, the turning movement from Tilton Avenue to Pleasant Street operates at LOS F in the P.M. peak hour "No Build" and "Build" condition.

As shown in Tables 7.1-15 and 7.1-16 the road segments will be at acceptable levels of service in all peak periods under both the "No Build" and "Build" conditions.

Table 7.1-11 2001 Signalized Intersection Levels of Service - A.M. Peak Hours

Ashland	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Main with Front	E	B	E	B
Westbound	C	D	C	D
Northbound	F	B	F	B
Southbound	B	A	B	A
Main with Summer	F	F	F	F
Eastbound	F	F	F	F
Westbound	C	C	C	C
Northbound	C	C	C	C
Southbound	F	F	F	F
Main with Union	F	E	F	F
Eastbound	F	F	F	F
Westbound	B	B	B	B
Northbound	C	F	C	F
Southbound	B	B	B	C
Union with Summer	E	E	E	E
Eastbound	E	E	F	F
Westbound	B	B	B	B
Southbound	C	C	C	C

Table 7.1-12 2001 Signalized Intersection Levels of Service - P.M. Peak Hours

Ashland	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Main with Front	E	D	D	C
Westbound	D	F	D	F
Northbound	C	B	C	A
Southbound	F	D	E	C
Main with Summer	C	B	D	B
Eastbound	C	D	C	D
Westbound	C	C	C	C
Northbound	B	A	B	A
Southbound	C	B	D	B
Main with Union	E	F	D	F
Eastbound	D	F	C	F
Westbound	F	F	E	E
Northbound	D	F	C	F
Southbound	C	C	C	D
Union with Summer	E	E	D	D
Eastbound	B	B	B	B
Westbound	C	C	C	C
Southbound	F	F	F	F

Table 7.1-13 2001 Unsignalized Intersection Level of Service - A.M Peak Hours

Ashland	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Pleasant with High				
LT from WB Pleasant	A	A	A	A
LT and RT from High	B	C	B	C
Pleasant with Site's DW				
LT from WB Pleasant	-	A	-	A
LT from Parking Lot	-	D	-	D
RT from Parking Lot	-	A	-	A
Pleasant with Tilton				
LT from WB Pleasant	A	A	A	A
LT and RT from Tilton	E	E	D	E
Main with Pleasant				
LT from NB Main	A	A	A	A
LT from Pleasant	F	F	F	F
RT from Pleasant	B	B	A	A
Cherry with Tilton				
LT from NB Cherry	A	A	A	A
LT and RT from Tilton	A	A	A	A
Summer with Cherry				
LT from EB Summer	A	A	A	A
LT and RT from SB Cherry	A	A	A	A
THRU and RT from WB Summer	A	A	A	A
Union with Site's South DW				
LT from EB Union	-	A	-	A
LT from Parking Lot	-	E	-	E
RT from Parking Lot	-	A	-	A

Table 7.1-14 2001 Unsignalized Intersection Level of Service - P.M. Peak Hours

Ashland	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Pleasant with High				
LT from WB Pleasant	A	A	A	A
LT and RT from High	D	D	D	D
Pleasant with Site's DW				
LT from WB Pleasant	-	A	-	A
LT from Parking Lot	-	E	-	E
RT from Parking Lot	-	A	-	A
Pleasant with Tilton				
LT from WB Pleasant	A	A	A	A
LT and RT from Tilton	F	F	E	E
Main with Pleasant				
LT from NB Main	C	C	B	B
LT from Pleasant	F	F	E	E
RT from Pleasant	E	E	D	D
Cherry with Tilton				
LT from NB Cherry	A	A	A	A
LT and RT from Tilton	A	A	A	A
Summer with Cherry				
LT from EB Summer	A	A	A	A
LT and RT from SB Cherry	A	A	A	A
THRU and RT from WB Summer	B	C	B	B
Union with Site's South DW				
LT from EB Union	-	B	-	B
LT from Parking Lot	-	F	-	F
RT from Parking Lot	-	D	-	C

Table 7.1-15 2001 Road Segment Level of Service - A.M Peak Hours				
Ashland	A.M. Peak Hour		A.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Cordaville Road West of Site	E	E	E	E
Pleasant Street East of Site	E	E	D	D
Cherry Street at Railroad Grade Crossing	C	D	C	D

Table 7.1-16 2001 Road Segment Level of Service - P.M Peak Hours				
Ashland	P.M. Peak Hour		P.M. Peak Generator Hour	
	No Build	Build	No Build	Build
Cordaville Road West of Site	E	E	E	E
Pleasant Street East of Site	E	E	D	D
Cherry Street at Railroad Grade Crossing	C	D	C	D

Summary of Findings with Unconstrained Ashland Parking

The basic findings of the traffic analysis were that most of the streets and intersections studied in Ashland are currently operating well. The addition of the proposed north and south commuter rail lots would attract a projected ridership of 856 patrons by the year 2001, while seriously impacting only two of the Town's intersections. These two signalized intersections lie south of the rail tracks on Union Street. The Main Street/Union Street and Union Street/Summer Street intersections would be burdened by the additional traffic during A.M. and P.M. peak hours. It should be noted that even without the proposed commuter rail station in place, these two intersections are projected to have serious congestion problems due to normal growth within five years, particularly during morning peak hours. Optimization of the signal timings at these intersections may realize an improvement for their level of service ratings. It should also be noted that construction of the commuter rail facility will have a positive impact on other routes throughout Ashland, particularly Route 135, Route 126, Main Street through the center of town, and the Massachusetts Turnpike, by removing a portion of their peak hour traffic. See Section 7.12 for proposed mitigation.

Impacts of Constrained Ashland Parking

While the MBTA prefers to develop 700 parking spaces at Ashland and has analyzed the impacts of those spaces, discussions with the Town of Ashland have so far failed to produce local agreement to more than 450 spaces, 200 to the north, as in the MBTA's preferred approach, but only 250 to the south. These 450 spaces will, according to estimates recently developed by CTPS, support Ashland Station ridership distributed by community in 1996 as shown in Table 7.1-17, and in 2001 as shown in Table 7.1-18, under the columns "No Millbury, Ashland and Southboro Constrained." Also supplied, for comparison, are Ashland figures in 1996 and 2001 with "All Stations, Southboro Constrained." To evaluate potential impacts on Framingham from constrained Ashland parking, Framingham ridership is shown for 1996 and 2001 with "No Millbury; Ashland and Southboro Constrained," "All Stations, Southboro Constrained," and--to simulate the current operations at Framingham as affected by Worcester Rail Interim Service, "No Westboro, Southboro, or Ashland." Except for CTPS's recent data in the columns marked "No Millbury; Ashland and Southboro Constrained," all the ridership data comes from Tables 49, 57, 64, and 67 of Appendix D of the March, 1996 FEIR.

Constraining Ashland parking will reduce traffic impacts in Ashland over impacts that have been analyzed already for unconstrained parking. However, constrained Ashland parking will shift almost all those precluded from parking at Ashland to Framingham: total ridership between the two stations, with Ashland parking constrained, is 99% [(889 +580) vs. (709 + 769)] of what would occur with Ashland unconstrained in 1996, and 95% [(936 + 589) vs. (742 + 856)] of what would occur with Ashland unconstrained in 2001. This includes shifting 75 riders from Ashland itself in 1996, and 113 in 2001--respectively, about 20%, in 1996, and 27%, in 2001, of Ashland ridership with unconstrained parking. In 1996, 71 riders from Holliston will be diverted from Ashland, 89 in 2001. Somewhat fewer vehicle trips would be shifted in each case, given the assumption of 1.12 riders per vehicle.

High volumes of ridership at Framingham have resulted from Interim Service--approximately 1363 in 1996 and 1545 in 2001, using CTPS's recent estimates for ridership at Framingham without Westboro, Southboro, and Ashland. As indicated in the March, 1996 FEIR, p. 8-2, Basic Service, which will be instituted well before 2001, is not expected to attract significant new ridership at Framingham. Instead, whether or not parking at Ashland is constrained, Basic Service ridership at Framingham will decline substantially, not only to below levels now associated with Interim Service, but to below 1994 Framingham ridership of approximately 977 before Interim Service was instituted in Fall, 1994. March 1996 FEIR, p. 8-8, Table 8.2-1. With Ashland parking unconstrained but Southboro parking constrained, Framingham ridership will be 709 in

1996 and 742 in 2001; with both Ashland and Southboro parking constrained, Framingham ridership will be 889 in 1996, and 936 in 2001.

Thus, by 2001, with Ashland parking constrained, there will be about 194 additional riders at Framingham over what would be expected without Ashland parking constrained. Most of the new ridership comes from Holliston (68) and Ashland (86), but new Framingham riders will also come from Southboro (18) and Hopkinton (23). See Table 7.1-18. Assuming an occupancy rate of 1.12 riders per vehicle, this will mean approximately 173 additional vehicles in 2001 in Framingham with Ashland parking constrained, assumed to be distributed in time in roughly the same pattern as existing Framingham Station traffic is now distributed. In 2001, of the 113 Ashland riders shifted from Ashland, only 86 go to Framingham, and the remaining 35 are lost, likely to highway commuting. Likewise, in 2001, of the 89 Holliston riders shifted from Ashland, only 68 go to Framingham, and the remaining 23 are lost, again likely to highway commuting.

Since, once the Ashland station is operating, Framingham ridership will be reduced below the levels existing in 1994 before Interim Service began, the net long-term effects of the project in Framingham are positive. Traffic is reduced and the parking supply is adequate to the demand, as Tables 7.1-17 and 7.1-18 show. Thus, no long-term mitigation for the project is required in Framingham under MEPA. The mitigation proposed by the MBTA in the March, 1996 FEIR is adequate for the short-term impacts of Interim Service, the only project impacts which, under MEPA, even arguably require mitigation.

Table 7.1-17. 1996 Framingham and Ashland Ridership and Parking, Various Scenarios

	Framingham			Ashland	
	No Westboro, Southboro, Ashland	No Millbury; Ashland and Southboro Constrained	All Stations; Southboro Constrained	No Millbury; Ashland and Southboro Constrained	All Stations; Southboro Constrained
Framingham	597	597	597		
Holliston	168	96	30	208	279
Ashland	186	95	20	302	377
Southboro	81	16		18	23
Hopkinton	103	22		34	56
Marlborough	16			18	35
Other	212	62	62		
Total	1363	888	709	580	770
Walk	265	265	265	20	20
Kiss'n'Ride	330	53	43	55	62
Park'n'Ride	768	570	402	505	688
Demand for Spaces	690	510	360	450	610
Supply of Spaces	600	600	600	450	700

Table 7.1-18. 2001 Framingham and Ashland Ridership and Parking, Various Scenarios

	Framingham			Ashland	
	No Westboro, Southboro, Ashland	No Millbury; Ashland and Southboro Constrained	All Stations; Southboro Constrained	No Millbury; Ashland and Southboro Constrained	All Stations; Southboro Constrained
Framingham	618	618	618		
Holliston	174	100	32	211	300
Ashland	233	108	22	306	419
Southboro	102	18		20	38
Hopkinton	141	23		34	63
Marlborough	24			18	36
Other	253	70	70		
Total	1545	937	742	589	856
Walk	279	279	279	20	20
Kiss'n'Ride	340	56	45	60	68
Park'n'Ride	926	600	419	509	768
Demand for Spaces	830	540	370	450	690
Supply of Spaces	700	700	700	450	700

7.2 Air Quality

Employing the rationale and methodology used in the November 1994 DEIR, the intersection of Main Street and Union Street (Route 135) was selected for the analysis (see Figure 7.1-1). Consideration was given for the Union Street/Summer Street/Cherry Street intersection, but sensitive receptors were lacking. The Main Street intersection with Summer and Homer Streets did not qualify since station generated traffic does not add to the existing condition. Optimization of the signal timing was employed for the Main/Union intersection under the "Build" condition.

In order to simulate the highest CO concentrations, receptor locations were established along the sidewalk areas nearest to the traffic lanes. The offsets are 24 feet from the center of both Main Street and Union Street. The results for the year 1996 are as follows in Table 7.2-1.

Table 7.2-1 1996 CO Concentrations - Main Street/Union Street Intersection

	1-Hour CO (ppm)		8-Hour CO (ppm)	
	No Build	Build	No Build	Build
Northwest Sidewalk	6.4	6.9	4.5	4.8
Northeast Sidewalk	7.0	7.6	4.9	5.3
Southeast Sidewalk	7.2	7.6	5.0	5.3
Southwest Sidewalk	6.5	6.8	4.6	4.8

Although the predicted CO concentrations are slightly higher for the "Build" versus the "No Build" condition, all values are well below the 35 ppm for the 1-hour standard and 9 ppm for the 8-hour standard. Additional receptors evaluated included the funeral home on the northwest corner, the New England Telephone office on the northeast corner, the real estate office on the southeast and a 2-family and single-family dwelling on the southwest. The predicted CO concentrations for the 1-hour case range from 4.7 ppm for the "No Build" condition to 6.1 ppm for the "Build" condition. Similarly, the 8-hour values range from 3.3 ppm to 4.3 ppm. The maximum increase for the "Build" condition is only 0.4 ppm.

7.3 Noise and Vibration

Noise Impact Analysis Methodology

Because of slow train speeds near stations, the potential for noise and vibration impacts from train operations are at a minimum compared to other segments of the right-of-way. There is, however, the potential for effects on the noise and vibration environment in the vicinity of the station because of project-induced traffic on roads leading to and from station areas, as well as short-term effects during construction of platforms, parking, and other site facilities.

Traffic Noise

The significance of noise impacts from project-generated traffic near proposed commuter rail stations along the corridor was assessed based on the projected noise increase

relative to the noise from existing traffic on applicable roads. Because the greatest changes in traffic volumes are expected to occur during peak commuting periods, the noise increase was evaluated in terms of the peak-hour L_{eq}.

Criteria for traffic noise impact are based on existing FTA guidelines, and state that a noise level increase of greater than 5 dBA is considered a significant impact. The existing FTA criteria are used here rather than the proposed FTA criteria used in the train noise assessment because of the general, non-site specific nature of the traffic noise impact assessment. Where the existing layout of major roads will essentially remain the same, the traffic noise assessment predicts only the change in noise resulting from the projected change in traffic volumes near the stations, and not the absolute traffic noise levels at specific noise-sensitive locations in the community.

The traffic noise analysis estimated the change in peak-hour traffic noise as a function of the change in peak-hour traffic volume assuming that all other non-project related noise sources remain unchanged.

Construction Noise and Vibration

The construction of a fixed facility such as a commuter rail station is expected to include clearing, excavation, foundation work, equipment installation, paving and finishing. Construction machinery is likely to include the types of equipment typically used for light industrial construction, such as graders, bulldozers, backhoes, cranes and trucks. Construction will typically occur during 8 to 10 hour weekday, daytime periods.

Construction of the station can be categorized in two distinct operations—parking lots and platform areas—with total duration of construction estimated to be approximately four to six months.

For a typical station site, the distance to significant noise impact was estimated to be 200 feet measured from the closest area of construction. In cases where noise-sensitive land uses were concentrated in a location very close to either the platform area or the parking area, separate screening distances were used to assess the two construction scenarios.

Station construction noise exposure was estimated using equipment noise levels and scenarios that are typical for non-residential construction (EPA, 1971). Usage factors were assigned to each piece of equipment to determine a cumulative reference noise level to use in determining the width of the noise impact zone.

Noise impact criteria for construction are based on the outdoor Annual Average Day-Night Equivalent Sound Level (AA L_{dn}), with a threshold of 65 AA L_{dn} defining the impact zone. This metric is slightly less conservative than the 24-hour L_{dn} used for train

noise impact, given the short-term nature of construction noise impact. (A complete definition of metrics and terms pertaining to noise and vibration used in this report were given in Appendix, Volume II, Section 3.0 of the November 1994 DEIR).

The impact criteria for construction vibration are essentially the same as for train operations, except that impact is assessed only when the activity will occur for 30 days or more at a given location. Ground-borne vibration from construction was estimated based on equipment source data found in literature (Wiss, 1974; FHWA, 1982; FTA, 1990) . Vibration projections were made for the main equipment categories, based on the relative amount of energy imparted to the ground. Details on this methodology are given in Appendix 3.0. A screening distance of 85 ft measured from nearest area of construction was estimated for vibration impact from general construction activity at stations.

Traffic Noise Impacts

The north side parking lot is located off Pleasant Street just east of the intersection with Cordaville Road. Both of these roads will be primary access routes for station patrons from the north. The peak hour L_{eq} is projected to increase by less than 1 dBA due to traffic volume increasing by a factor of only about 1.03. No noise impact is projected for residences on Pleasant Street or Cordaville Road.

Traffic destined for the parking lot south of the tracks would result in volume increasing by a factor of 1.2 during the P.M. peak hour along Union Street between Summer Street and the parking lot driveway, and a slightly lesser increase south of the driveway. The peak hour L_{eq} would increase by less than 1 dBA; therefore, no traffic noise impact would occur due to station generated traffic.

The two lane, 4,000-foot-long access drive into the south side parking lot will traverse vacant land and no significant traffic noise impact is anticipated.

Construction Noise and Vibration Impacts

There are no residential buildings located within the screening distances for construction noise and vibration impacts. Adjacent land uses consist of a restaurant and a commercial building.

While the duration of station construction is expected to be approximately four to six months, construction activity near any of the potentially affected buildings will be intermittent and of short duration. Vibration effects from heavy construction equipment would occur over a period measured in hours, rather than days or weeks. No significant noise or vibration impacts are anticipated.

Traffic Noise Mitigation

No significant traffic noise impact was identified for Ashland Station.

Construction Noise and Vibration Mitigation

As described in previous text, no significant noise impacts were identified from construction activities at Ashland Station. No site-specific mitigation plan is necessary.

Section 1.07 of the Standard Specifications used by the MBTA for construction contracts include noise control measures as follows:

"Use every effort and every means possible to minimize noise caused by construction operations, which the Engineer may consider as objectionable. Provide working machinery and equipment designed to operate with the least possible noise, and when gearing is used, such gearing shall be of a type designed to reduce noise to a minimum. Equip compressors with silencers on the intake lines. Equip gas or oil operated equipment with silencers or mufflers on intake and exhaust lines. Wherever practicable, electricity shall be used for power to reduce noise. Dumping bins, hoppers, and trucks used for disposal of excavated materials shall be lined with wood or other sound-deadening material if required. Where required by agencies having jurisdiction, certain noise-producing work may have to be performed during specific periods only."

No significant construction related vibration impact was identified at Ashland Station and no mitigation is required.

7.4 Site Drainage

The proposed Ashland Station lies within the Sudbury River watershed. Existing land uses include a restaurant and one story wood frame commercial building north of the tracks, and an undeveloped wooded area south of the tracks. Soils north of the tracks are classified as "somewhat excessively drained" on glacial outwash plains. Soils south of the track are classified as "very poorly drained soils," consisting of loam and fine sandy loam.

The north side of the site consists of a restaurant with gravel parking area, a one story commercial building, and various vegetation. The site slopes generally towards High Street and Pleasant Street. Most of the drainage enters the existing storm drain systems in High and Pleasant Streets prior to discharge to the Sudbury River. Portions of the site drain to an existing low area within the site. This area is approximately three feet deep and is identified as flood plain on Flood Insurance Rate Map (FIRM) for the Town of Ashland, community panel number 2501790001 dated July 16, 1981.

The south side of the site consists of a low lying wooded area which drains in an easterly direction to the proposed wetland replication area north of the Nyanza Superfund site.

The proposed project development consists of 700 paved parking spaces (164 plus a minimum of 36 spaces to be made available by the restaurant on the north and 500 spaces south of the railroad tracks), sidewalks, platforms, stairs, ramps, a pedestrian overpass, lighting and landscaping. A new 4,000 foot long roadway is proposed to access the south side parking area.

Design review comments, conditions, and recommendations made by the Conservation Commission will be incorporated into the final drainage design of the Station to minimize runoff impacts to the Sudbury River. The BMPs proposed include implementation of a parking lot sweeping program, erosion control features and a stormwater management plan consisting of detention areas, recharge systems and catch basins equipped with sumps and oil and grease traps. Catch basin sumps are very effective in removing larger sized sediments, with associated contaminants, from parking lot runoff.

General maintenance of the station will include the implementation of a regular parking lot sweeping program. One objective of a sweeping maintenance program is to remove as many contaminants as possible from the parking lot surfaces before they are washed into the stormwater collection system. Studies have determined that a large percentage of contaminant loads are bound to fine particulates (silt and clay particles) and thus a regular sweeping program will be effective in reducing pollutant loadings and improving runoff water quality. Cleaning of catch basins will remove additional sediment and large debris from the stormdrain system.

General maintenance also will include the removal of trash and organic debris (leaves and fallen branches). This will not only reduce loadings of nutrient related contaminants, but will keep the stormwater collection/management system clear and working properly.

Stormwater runoff from the north side parking lot will be directed to the existing High Street and Pleasant Street stormdrain collection systems which discharge into the Sudbury River. Prior to entering these systems, all proposed site drainage will flow through catch basins equipped with sumps and oil/grease traps. Portions of the runoff will also be routed through a subsurface detention/storage system in an effort to best replicate existing stormwater patterns and flow rates.

Stormwater runoff from the south side parking lot will be routed through a proposed stormwater detention basin. The basin will be graded with relatively gradual sideslopes (3 horizontal to 1 vertical), and the bottom will be vegetated and be normally dry. The basin will be sized to contain stormwater flows from storms up to and including the 100

year event. An outlet control structure will be designed to release the detained stormwater at a peak flow rate which will not exceed existing conditions during the 10 and 100 year storm events.

Water Supply

The Town's public groundwater wells are located off Howe Street approximately three miles south of the Howe Street bridge. Town Well #3 is an abandoned water supply well near the railroad on High Street. According to the Ashland Water Department, the Town does not have any plans to bring the well back on line. The Board of Health has been consulted regarding private wells in the area. There are some private wells on Howe Street approximately 500-600 feet north of the railroad. Stormwater management for the station parking lot as discussed above would not direct runoff toward these wells.

7.5 Wetlands and Wildlife

The Ashland Station site lies at the base of a steep hill (the northeast portion of Megunko Hill). Wetland resources contained within the site consist mainly of a red maple swamp. The wetland is dominated by woody trees and shrubs with a predominance of skunk cabbage and wetland ferns forming the herbaceous layer. Several intermittent channels, which would be regulated as "bank", were also identified. These channels run up the slope and appear to feed the wetland.

Construction of the south side parking lot and access road is located in an area where wetland impacts cannot be avoided. The original station design proposed the alteration of approximately 2 acres of wetlands. The site has been reconfigured and redesigned to minimize wetland impacts to the maximum extent possible. The current Ashland Station design proposes the alteration of approximately 38,000 square feet of bordering vegetated wetlands. Any project altering more than 5,000 square feet of bordering vegetated wetlands requires permits under the Federal 404 program (administered by the Army Corps of Engineers), and the State 401 program (water quality certification administered by the Department of Environmental Protection), and a variance under the Massachusetts Wetlands Protection Act from the Commissioner of the Department of Environmental Protection under 310 CMR 10.58.

The variance application will include a description of all mitigation measures proposed and evidence that the project is associated with an overriding public interest. The alternatives analysis will include the "Ashland Station - East Alternative" described in the introduction to this Section 7.0 as well as all other alternative sites studied to date. Mitigation measures will include a detailed design of the wetland replication area

identified in Figure 7.0-1. The overriding public interest of the project lies with advancing the overall State Implementation Plan (SIP) in compliance with the Federal Clean Air Act.

A detailed wetland delineation and assessment plan has been developed for this site and a Request for a Determination of Applicability has been filed with the Ashland Conservation Commission under the Massachusetts Wetlands Protection Act, G.L.C. 131, Section 40. The wetland delineation plan of record includes reviewed input from the Commission made during the Determination of Applicability process. The Commission issued a positive determination for this project on December 26, 1995 requiring the filing of a Notice of Intent. The Notice of Intent and the subsequent variance request from the DEP Commissioner will include mitigation measures that will allow the project to be conditioned so as to contribute to the protection of the interests of the Wetlands Protection Act identified in M.G.L. c.131, S40.

7.6 Historic Properties/Sites

Using the explanation of the architectural survey presented for the Westborough Station in Section 5.6 of this FEIR, the following Ashland properties were evaluated and found to be eligible for National Register listing.

- the Tilton Avenue/Cherry Street Area as part of the larger Ashland Center Historic District;
- the Kane/Ward Farmhouse at 34 Fountain Street as a well-preserved example of a mid-19th century farmhouse with attached barn;
- and the Telechron Watch Company, constructed in 1927 at 50 Homer Street as the only Modern style building in Ashland.

Although proximity to the rail line is as close as abutting the railroad right-of-way, the proposed Ashland Station will not affect any of the properties, nor the Ashland Center Historic District.

Of the four bridges surveyed in Ashland -- Conrail over unnamed stream, Conrail over the Sudbury River (2), and Conrail over Indian Brook -- the Conrail bridges over the unnamed stream and over the Sudbury River at MP 23.54 are considered individually eligible for National Register listing. No project impacts are anticipated for this active rail line.

7.7 Archaeological Resources

Station area archaeological potential builds on the studies performed for the entire railroad right-of-way, where overall sensitivity ratings were developed, each implying different cultural resource survey recommendations. (See Appendix H in the March 1996 Final EIR.)

In accordance with the approved permit by the MHC, a reconnaissance survey indicated that the station area has high probability of containing prehistoric sites, although there are no known sites. Much of the proposed station site north of the tracks has been disturbed by existing development. An intensive archaeological survey was conducted to determine if potentially significant archaeological resources are present on the site. The field work was completed. Upon laboratory analysis, no significant historic or prehistoric resources were recovered from the station site or the access road area. The complete report, covering the Westborough, Southborough, and Ashland Station sites, is in progress.

7.8 Visual Impacts

The major visual features of the commuter rail station will be the open expanse of paved parking and those several vertical elements that include the station platform canopy, a pedestrian overpass, and station lighting.

The parking area will be set back approximately 10 feet from abutting streets and a landscaped planting area or buffer zone will be provided. The parking lot is planned to be similar in appearance to a parking lot of a supermarket or shopping area. There will be enough landscaping to create a pleasing environment but limited so as not to create a major maintenance requirement.

The most dominant of the vertical features will be the pedestrian ramp and stairway structure to cross over and connect the platforms on both sides of the tracks. The structure over the tracks will provide 21 feet of clearance above the tracks. The structure will have a roof and therefore will approach a total height of 30 feet. To meet the accessibility requirements, the ramp must be no more than 8 percent in grade.

Given the general lack of nearby residential development, the overall visual impact of the Ashland Station will be minor.

The parking lot and station area will be lighted at night. The lighting will be operated by photoelectric cells and time clocks. The photoelectric cell detects when it becomes dusk

and turns on the lights. A clock timer is used to shut off the lights approximately ½ hour after the last scheduled commuter train will pass through the station. To light the parking lot, the MBTA will use high pressure sodium luminaires (light fixture) on approximately 30-foot-high light poles. The luminaires will be different from street lights in that the MBTA will use cut-off luminaires that direct the light downward with minimal spill-over onto adjacent parcels. The light source from a cut-off luminaire is not visible to a pedestrian unless standing under the light, whereas the light from regular street lights tends to spill over to adjacent properties and is visible from a long distance. Although the lights will be on until about ½-hour after the last train, they should not be a visual disturbance to nearby residential uses.

7.9 Hazardous Materials

An environmental site evaluation has not been performed for the Ashland Station site. A site evaluation was performed for the formerly considered Ashland Station - East Alternative under Massachusetts General Laws, Chapter 21E (M.G.L.c.21E). As presented in the November 1994 DEIR, soil and groundwater samples generally did not contain higher than normal background levels of the reference hazardous materials. A complete site evaluation of the north and south station areas will be performed shortly. Since the station location is upgradient of the Nyanza Superfund Site, previously reported on in the November 1994 DEIR, and the area south of the tracks is undeveloped, there is a low probability of hazardous materials being present.

7.10 Pedestrian Safety

The CTPS ridership projections forecast 20 patrons walking to the Ashland Station on average weekday. It is assumed that these walkers would likely be from the residential areas north of Pleasant Street and could use the existing sidewalk along the north side of Pleasant Street to reach the commuter rail station. Based on recent meetings with town officials, other proposed sidewalks in the immediate area, although not considered as mitigation per se for station impacts, include the following:

- On Cordaville Road, from the intersection at Pleasant/High Street, westerly along the south side of Cordaville Road for a distance of about 3,300 feet;
- on Pleasant Street, from the intersection at High Street, easterly along the south side of Pleasant Street (past the station driveway) for a distance of about 2,400 feet; and

- on High Street from Whittemore Drive to the new High Street bridge over the railroad, a distance of about 1,500 feet.

As noted elsewhere, intertrack fencing will be constructed through the station area to discourage pedestrian crossing of the tracks. A pedestrian bridge, accessible to the handicapped, will be constructed over the tracks to connect station platforms to parking facilities.

7.11 Construction

Construction related impacts typically involve issues of traffic to and from the work site, air quality, noise and vibration, erosion and sedimentation, and safety. Construction will take approximately 4 to 6 months. Station site work will involve clearing, excavation, foundation construction, paving, and installing/erection of site facilities such as pedestrian bridges and station canopies. Construction equipment likely to be used includes graders, bulldozers, backhoes, cranes, and trucks.

Construction related traffic impacts are not expected to be significant. During certain short-term phases of construction, there will be concentrated deliveries of materials, such as during paving of the parking areas. Station construction will not be particularly labor-intensive, either, and traffic generated by the labor force will not adversely affect level of service on nearby roads.

There will be short-term, intermittent increases in air emissions from construction equipment and site-related construction traffic. No violations of air quality standards are anticipated.

Water will be sprayed on exposed earth surfaces to control fugitive dust from construction vehicle traffic or from wind erosion.

Silt barriers, consisting of hay bales and silt fence, will help trap sediments from construction site runoff. Limiting the area of earth exposed at any one time will help minimize both wind and water erosion. Compliance with the recommendations of the Ashland Conservation Commission will ensure that adverse effects on water quality and resource areas are minimized.

Potential construction noise and vibration impacts and possible mitigation are described in the preceding Section 7.3.

Station site construction activities that present a potential safety concern will be secured by temporary fencing or other barriers. The contractor will be required to adhere to all pertinent regulations regarding use and storage of hazardous or toxic materials on the site.

7.12 Proposed Mitigation

Intersections in Ashland center have capacity problems in the A.M. and P.M. peak periods. Approximately 70% of the existing traffic crossing the railroad tracks in Ashland Center in the A.M. and P.M. peak periods is traveling to points north or south of the center.

Under Interim Service, commuter rail trains activate the grade crossings in Ashland during the A.M. and P.M. peak traffic hours. The duration of each closing is approximately one minute. The MBTA has monitored and evaluated the effects of gate closings on traffic operations, particularly at the two signalized intersections on Main Street north and south of the grade crossing. While the gate closings for the commuter rail trains create instantaneous turbulence in the traffic flow at the Main Street/Front Street intersection and the Main Street/Summer Street/Homer Avenue intersection, after two signal cycles the traffic returns to normal flow. Widening Main Street to add more lanes and increase the capacity is not feasible. This built-up area of Ashland has physical limitations that prevent any major roadway improvements. Observation of signal operations indicates that the current signal progression on Main Street is adequate.

The southern area of Ashland Center along Route 135 (Union Street) also has a capacity problem, although not caused by the railroad gate closings. Route 135 is the main arterial that connects downtown Ashland to Hopkinton and Upton. Commuter rail service will result in diversion of traffic, as some of the traffic now traveling through the downtown grade crossing will be diverted to the commuter rail station through the station driveway on Route 135.

Proposed mitigation at the intersection of Union Street and Summer Street consists of adjusting the signal timing to improve the intersection's operation to LOS B in the A.M. peak hour and LOS C in the P.M. peak hour.

Proposed mitigation at the intersection of Main Street and Union Street consists of replacing the existing signal equipment with a new fully actuated signal system that will improve operations at this intersection. The existing lane configuration is sufficient for a signal system that provides exclusive and protected left turn movements. The new signal will provide timing based on traffic demand. Estimated construction cost for the new signal and related work is $150,000.

Table 7.12-1 2001 Peak Hour Signalized Intersection Level of Service

Ashland	A.M		P.M.	
	w/o Mitigation	w/Mitigation	w/o Mitigation	w/Mitigation
Union St and Summer St.	E	B	E	C
Eastbound	E	B	B	C
Westbound	B	B	C	C
Southbound	C	C	F	D
Main St. and Union St.	E	D	F	D
Eastbound	F	D	F	D
Westbound	B	B	F	C
Northbound	F	D	F	D
Southbound	B	B	C	D
Union St. and Driveway	E	D	D	D
Eastbound	F	E	B	B
Westbound	B	B	E	E
Southbound	C	C	C	C

Table 7.12-2 2001 Peak Generator Hour Signalized Intersection Level of Service

Ashland	A.M		P.M.	
	w/o Mitigation	w/Mitigation	w/o Mitigation	w/Mitigation
Union St and Summer St.	E	C	D	C
Eastbound	F	C	B	B
Westbound	B	C	C	C
Southbound	C	C	F	C
Main St. and Union St.	F	D	F	C
Eastbound	F	D	F	D
Westbound	F	B	E	B
Northbound	F	D	F	C
Southbound	C	B	D	C
Union St. and Driveway	F	D	C	C
Eastbound	F	E	A	A
Westbound	C	C	C	C
Southbound	C	C	C	C

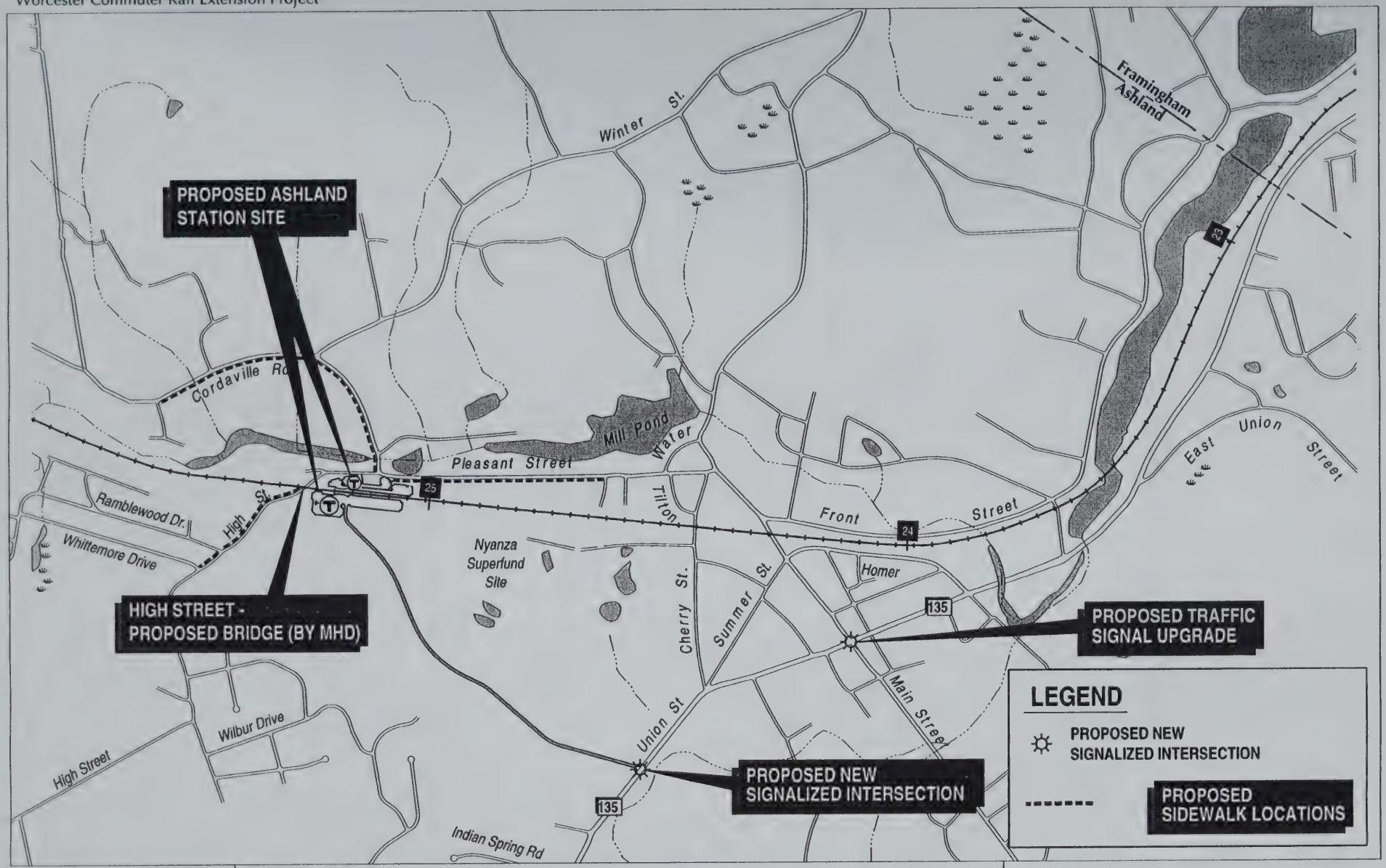
At the Union Street and southern station driveway intersection, the proposed improvements consist of widening Union Street to provide an exclusive left turn lane on the Union Street eastbound approach and installing a semi-actuated traffic control signal system. Estimated construction cost is $300,000.

As a result of meetings with town officials, the MBTA has agreed to install a total of approximately 7,200 feet of sidewalk on Cordaville Road, Pleasant Street and High Street, as previously described above in Section 7.10. (See Figure 7.12-1). The sidewalk installation has an estimated cost of $96,000, exclusive of any right-of-way required. This is not mitigation, but for the convenience of MBTA patrons and local residents.

The MBTA requests that the Secretary express her views as to the trade-offs involved in the disagreement between the MBTA and the Town of Ashland concerning the scale of Ashland parking. Both parties agree on 200 spaces to the north of the tracks; the MBTA prefers 500, the Town of Ashland 250, spaces to the south of the tracks.

The trade-offs turn on three issues. First, the reduced number of spaces preferred by the Town of Ashland will reduce the amount of wetlands that will need to be disturbed by the project. The MBTA's preferred approach would disturb 38,000 square feet, approximately 7,000 square feet for the road and 31,000 square feet for the parking lot. The Town of Ashland's approach, 50% of the MBTA parking goal in the south, would disturb about 23,000 square feet. Both would require a wetlands variance, however, the

MBTA can replicate 38,000 sf, and more if necessary, of the disturbed wetlands within the existing site. Second, the driveway costs for the spaces served will double under the Town of Ashland's approach, since the same driveway, at the cost of approximately $1 million, will only serve half the riders, while other Ashland mitigation will not be reduced. Third, the MBTA's preferred approach would not divert traffic from Ashland to Framingham and mitigates project-related traffic adequately, while the Town of Ashland's preferred approach would divert significant amounts of traffic and thus project ridership originating from within Ashland itself, as well as traffic and ridership from other communities. Nonetheless, as the MBTA indicates above, traffic at Framingham when Basic Service starts, even with constrained Ashland parking, will be well below current levels associated with Interim Service and indeed below the levels of prevailing before Interim Service began in 1994; moreover, Framingham mitigation has been proposed to offset the short-term impacts of Interim Service, and the diversions occasioned by constrained Ashland parking require no additional Framingham mitigation.



Massachusetts Bay Transportation Authority

Approx. Scale: 1" = 1500'

0 1500

ASHLAND STATION MITIGATION PLAN

FIGURE 7.12-1

SECTION 8.0 RESPONSE TO COMMENTS

Introduction

The EOEA Certificate on the Draft EIR (March 16, 1995) cited 87 letters from commentors to the Secretary of Environmental Affairs (adding some late comments, the comment list grew to 98). Many of these comments were responded to in the March, 1996 Final EIR covering Millbury Station, Grafton Station and Railroad Operations; some of the comments, in particular those pertinent to the Westborough, Southborough, and Ashland Stations, were deferred for responses to this Final EIR. The EOEA Certificate on the Final EIR for Railroad Right-of-Way and Layover Facility (September 14, 1995) cited 9 letters from commentors. All of these comments were responded to in the March 1996 Final EIR. The EOEA Certificate on the Final EIR for Millbury Station, Grafton Station and Railroad Operations (June 14, 1996) cited 21 letters from commentors plus 25 (including a cover letter and summary of comments) letters from Flint Pond Residents in Worcester and several others expressing opposition to a Millbury Station. Although the comments from Flint Road Residents covered a typical variety of concerns, the response will be in Section 8.1, Responses to Commonly Raised Questions.

This section of the report summarizes concerns that were frequently raised in the comment letters. Though the impacts associated with this project are spread across six communities, the four towns in which a commuter rail station has been proposed as well as Framingham and Worcester, many of the comments were specific to a particular community. Many of these frequently raised comments also were raised by the Secretary in a more generic manner in her certificates. For this reason a response to these issues, as expressed in the Secretary's Certificates, is being provided to address common concerns expressed by all commentors.

8.1 Responses to Commonly Raised Questions

Comments on November 1994 Draft EIR

The comments received on the November 1994 Draft EIR covered a variety of topics. Many of the comments were responded to in the Appendix - Volume 1 of the March 1996 Final EIR, and some were deferred to the current document. Commonly raised questions prompted a general response rather than addressing each comment on an individual basis. The commonly raised questions on the Draft EIR included comments on the regional station issue, local street use by proposed station commuters, commuter station security and the Ashland Station site selection. The most common concern raised around the March 1996 Final EIR was the Millbury Station location and its impacts.

Regional Station

The comments on the regional station matter covered a broad range of concerns including the need to study a regional station, the expressed desire for a regional station versus one or more local stations, monetary matters, and a variety of traffic and other environmental issues. All of the 45 comments received on the 11/94 DEIR regarding a regional station were responded to in the March 1996 FEIR by referring the commentor to the response to Comment 1-9 and/or indicating that the matter would be further addressed in FEIR #3. Comment 1-9, made by the Secretary of Environmental Affairs in the March 16, 1995 Certificate on the DEIR, is repeated below with the response.

> *"Comment 1-9*
>
> *'I also note that the MBTA will be conducting a report to the Legislature on this issue [Regional Station Alternative] in the near future, as directed by the recently passed Transportation Bond Bill. I request that the MBTA carefully consider the concerns and arguments raised during this review. I also request that the report to the Legislature be made available for public comment (through a notice in the Environmental Monitor) and that the (next) FEIR report on the results.'*
>
> ***Response***
>
> *Notice of availability of the Regional Station Feasibility Study appeared in the Environmental Monitor. A brief summary of the study is in Section 3.3 of this FEIR #2; a further presentation will be in FEIR #3 which will report on the proposed Westborough, Southborough, and Ashland commuter stations."*

In addition to the update on the regional station matter contained in Section 2.4 of this Final EIR (FEIR #3), the Executive Summary of the January 1996 Regional Station Feasibility Study is included in Appendix B of this document. As directed by the Secretary, the draft report was noticed for public comment in the *Environmental Monitor*. No comments were received on the draft report. The final report, issued in January, 1996, is available for review at the local libraries in Framingham, Ashland, Southborough, Westborough, Millbury, Grafton, Worcester, and Hopkinton, as well as the State Transportation Library in Boston.

Local Streets

Numerous concerns were expressed regarding potential traffic impacts on local streets resulting from commuter rail patrons. The assignment of commuter rail patrons to certain routes has been questioned. At issue ultimately is the numbers of vehicles predicted to travel on certain streets, and whether or not the total traffic results in serious delays or produces unsafe conditions. Actual routing was based on the shortest travel time and/or distance from a given population center to a station site. This methodology is not an exact science, but is used uniformly for all communities which contribute to the traffic demand on area roadways. Surely some of the station-bound traffic will use roadways other than those indicated. Outsiders usually travel more predictable routes than residents of the host community.

Grafton Station

In Grafton, due to the elimination of a Millbury Station, additional station-related traffic will travel to and from the Grafton Station via Route 122, thus affecting the so-called Quinsigamond Corner (Route 122, Worcester Street -Bridge Street-Route 140, North Main Street). Traffic analyses reveal that a level of service (LOS) `F' -- delays in excess of 60 seconds for the minor street traffic -- currently exists at the intersection of Bridge Street/North Main Street and for through traffic southbound on Route 140 at Route 122. The addition of commuter traffic will worsen both locations in terms of delays, but the standard methodology does not allow for a reliable documentation when comparing to a situation that is already `broken'. The MBTA acknowledges that added Grafton Station traffic may aggravate the existing unacceptable conditions and offers to mitigate the impact as presented in Section 2.2 of this document (and in the Draft Section 61 Findings in Appendix C).

Westborough Station

In Westborough, concern for station-related traffic on local streets was voiced by town officials and many area residents, focused on the assignment of travel routes for station-generated traffic. As previously stated, the methodology is not an exact science. Employing a `what if' situation for several local Westborough streets, the effects would be as follows:

Maynard Street

Firstly, the Route 9/Otis Street signalized intersection has been questioned by several commentors regarding its ability to handle properly the traffic flow and/or certain turning movements during peak traffic periods. Since publication of the Draft EIR additional traffic has been added to the intersection by the WalMart development in the northwest quadrant. Also, the lane changes, including a longer left turn storage lane for turns from Route 9 to Otis Street, and signal timing changes which were installed recently by the Massachusetts Highway Department (MHD) are factored into the operational analysis. For the A.M. peak hour in 1996, the overall intersection is projected to operate at LOS `C' under both the "No Build" and "Build" conditions. The left turns from Route 9 westbound to Otis Street southbound will have sufficient storage and timing to accommodate the "Build" condition traffic demand with minimal delay.

In the evening, the Route 9 intersection operates at an overall LOS "D." Station traffic northbound on Otis Street has an exclusive right turn lane to Route 9 eastbound. Turns may be made safely during exclusive left turn phases for both Otis Street and Route 9, as well as during the Otis Street green time for through traffic. Delays for station traffic are expected to be minimal, and commuters will not be diverted to local streets.

The above turning movements are those that would be used by station traffic from Northborough.

The 90 patrons from Northborough account for nearly 41% of the Westborough Station riders on Figure 5.1-4 of this document, 38.5% of the total ridership is assigned to Route 135 southbound, Route 9 westbound, Otis Street southbound and then onto Smith Valve Parkway. These Northborough commuters are expected to use the assigned routing, which will be signed directing rail patrons to the Westborough Station.

What if some of Northborough patrons continued south on Route 135 across Route 9 and used Maynard Street to Fisher Street to Otis Street to Smith Valve Parkway? The following table presents three different scenarios for the four A.M. peak period trains.

Train No.	Depart Westborough Station	Total Patrons per Train	Northborough Patrons via Route 135	15% to Maynard St.	33% to Maynard St.	50% to Maynard St.
502A	6:17A.M.	36	14	2	5	7
504A	7:07 A.M.	60	23	4	8	12
506	7:37 A.M.	60	23	4	8	12
506A	7:57 A.M.	29	11	2	4	5
Totals		185*	71	12	25	36

*221 (total) x 0.94 (peak period factor) ÷ 1.12 (patrons per auto) = 185

Recalling that the A.M. peak hour is from 7:30 to 8:30 and the A.M. peak generator hour (the period when most patrons will access the train) is from 7:00 to 8:00, the first train at 6:17 A.M. would be outside of any peak traffic period and would attract only 2 additional vehicles to Maynard Street if 15% of the Northborough patrons opted for this routing. The number rises to 7 additional vehicles if 50% chose Maynard Street. Using the 15% factor, only 12 additional vehicles would use Maynard Street over a period of nearly 2 hours.

According to local commentary, Maynard Street has been labeled as too narrow, with poor sight distance, a lack of shoulders and restricted to one lane under the railroad bridge. It would seem that the street would not be too attractive for commuters. If some of the Northborough patrons, in addition to approximately 5 patrons from Westborough spread over four A.M. trains, opt to use Maynard Street, the impact is not considered to be significant.

The sidewalks on Maynard Street, requested in the comments of some local residents, are primarily to ensure safety for students walking to schools on Fisher Street. Although sidewalks are very desirable, a recent meeting with local officials concluded that insufficient right-of-way would likely require easements for sidewalk construction. Liability issues could result. In addition, the time schedule for the trains indicates that the 2 earliest trains (#502A and #504A) would be prior to students walking to area schools.

Fisher Street

Using the revised CTPS ridership projections, a total of 42 Westborough residents are projected to take the train at the Westborough Station. Based on population distribution, it is estimated that 2.6% of the total ridership would use Fisher Street (between Milk Street and Mill Road). Thus a total of about 5 Westborough residents would use this section of Fisher Street over a 2 hour period to gain access to the station each weekday morning. Two or three of the total will be prior to school hours. Based on information provided in the Westborough Planning Board DEIR Comment Letter No. 29, it is very unlikely that any Northborough patrons would opt to use Fisher Street. And, according to the Westborough Planning Board, there would appear to be a consensus that patrons from Upton would travel via West Main Street, Mill Road and Fisher Street to the station. The short section of Fisher Street between Mill Road and Otis Street will carry the patrons from Upton plus some additional Westborough patrons. Based on meetings with local officials, sidewalks will be constructed by the MBTA in this area.

Mill Road

It has been projected that a total of 19.9% of the Westborough Station traffic will opt to use Mill Road to access the station. The patrons include all those from Upton (25 riders) and 19 patrons from Westborough. The total number of vehicles using Mill Road to the station in 1996 would be 37 over a period of about 2 hours. The turns from Mill Road onto Fisher Street function at LOS "B" or better for all peak periods. No significant impacts are predicted.

Arch Street

Arch Street is not situated, relative to the communities from which most of Westborough Station patrons will come, such that station-bound traffic would have a strong desire to use the street. The projected ridership using Arch Street would be Westborough residents who would travel to the station via Fisher Street to Smith Valve Parkway. The additional cars on Arch Street for the A.M. peak commuting period trains would total approximately 6 to 7 vehicles over a 2 hour period. There will be no noticeable impact.

Walnut Street/Gleason Street

Only patrons from Shrewsbury might use Walnut Street and Gleason Street to access the Westborough Station. In this FEIR, it is projected that approximately 13 vehicles

from Shrewsbury would travel this route in the 1996 A.M. peak commuter period, or about 3 vehicles for the first A.M. train at 6:17, about 4 vehicles for each of the second and third trains at 7:07 and 7:37, respectively, and about 2 vehicles for the last peak train at 7:57 A.M. Even if some of the Shrewsbury patrons now assigned to use Route 9 and Otis Street to access the station were to travel Walnut and Gleason Streets, the effect should not be significant.

Southborough Station

In Southborough the question of how patrons will drive to the station does not seem to be an issue. The intersections which required analysis and possible consideration for mitigation are as follows.

River Street (Route 85)/Southville Road

Previously projected as mitigated by proper signal timing, the recent agreement to close Cordaville Road from River Street to Southville Road now requires a new signalized intersection with exclusive turn lanes on all legs.

Woodbury Road/Route 85

The turns from Wood~~bury~~ Road to Route 85 are at LOS "E" or "F" for all peak periods under the "No-Build" and "Build" conditions.

Discussions regarding realigning the intersection, including displacing the service station at the intersection, have been held. Although there would be some improvement in the safety aspect of the location, even a realigned intersection would not result in any significant improvement to traffic operations.

Route 85/Route 30 (Main Street)

Although some A.M. peak hour turning movements are affected by station traffic, the improvements would seriously impact the local character of the setting. Upon opening of the Southborough Station, the situation will be monitored and the traffic signal timing will be optimized as necessary.

Richards Road

Although not a part of the DEIR traffic analysis nor a specific comment on the DEIR, recent concerns have been expressed by residents and local officials regarding the need for some improvement at the unsignalized intersection of Richards Road and Cordaville Road (Route 85). The town has recently performed some basic traffic

counts on Richards Road. At this time it would appear that a traffic signal at this location would not be warranted, but additional data, including directional flow and turning movements, are necessary in order to make a more informed judgement. The MBTA will continue to work with town officials in this matter.

Ashland Station

Main Street Railroad At-Grade Crossing

As described in Section 4.3 of this FEIR, no geometric improvements are feasible for the grade crossing. Under Interim Service, commuter rail trains activate the grade crossings in Ashland during the AM and PM peak traffic hours. The duration of each closing is approximately one minute. The MBTA has monitored and evaluated the effects of gate closings on traffic operations at the two intersections on Main Street north and south of the grade crossing. While the gate closing results in disruption of the traffic flow, after two signal cycles, operations return to normal.

Main Street/Union Street (Route 135)

Due to the significant amount of station-bound traffic through the intersection, and in cooperation with efforts already underway by the town, the MBTA proposes to install a replacement traffic signal system which will provide for proper phasing and timing for desired turning movements.

Union Street (Route 135)/Station Access Drive

In order to accommodate left turns from the south into the station and left turns to the north from the station in the morning and evening, respectively, the MBTA proposes to install a new traffic signal system and exclusive turn lanes at this location. It is expected that the town will provide assistance in right-of-way and permitting matters.

Commuter Station Security

The MBTA is responsible for the proper maintenance and security of its commuter rail parking lots. The MBTA currently owns well over 100 suburban parking lots, and as such, will be implementing the same management practices, which have proven quite successful, at the Worcester line stations.

The MBTA seeks to establish a cooperative relationship with local law enforcement to respond to emergency issues or reports of criminal activity at stations. Based on

experience at other stations, crime, or any need for police assistance, should be minimal at worst. MBTA crime statistics, going several years back, show very little criminal activity at commuter rail stations. There is no reason to believe these suburban stations would prove any different. If, however, police response requirements are routinely more than a local police force is able to handle, the MBTA police force will be made available to deal with chronic problems (e.g., illegal parking).

Ashland Station Siting

The November 1994 DEIR presented two Ashland Station options -- Ashland Station - East Alternative and Ashland Station - West Alternative. After a lengthy study which involved many alternatives and input from concerned citizens, local officials, businesses, and State and Federal agencies, the Ashland Station - East Alternative has been dropped from further consideration. Among the key concerns were the economic hardship caused by displacement of up to 14 businesses, environmental issues associated with construction within a known hazardous waste site, and disruption with the EPA's Phase II and Phase III cleanup operations. The Ashland Station - West Alternative, which has been revised since the version shown in the DEIR, has been selected for implementation. The revisions include a reconfigured north side parking lot with some shared parking with a local restaurant and the station access drive on Pleasant Street versus High Street; the south side parking lot, with the same access drive from Route 135 (Union Street) as presented previously, has been reconfigured to be more sensitive to the bordering vegetated wetlands. Other sections of this FEIR describe the proposed station and its potential impacts and mitigation.

Comments on March 1996 Final EIR

Millbury Station

The comments received on the March 1996 Final EIR covered a variety of topics and concerns. Each comment is addressed in a response contained in Section 8.2 of this document. Many of the comments addressed the proposed Millbury Station, with the access drive off Route 20 in Worcester. Most of the Millbury Station comments were made by the Flint Pond Residents (Flint Pond is a residential subdivision north of the station site in Worcester), elected officials, local and state agencies, and concerned individuals. The comments addressed existing substandard roadways, traffic impacts, accident potential, station safety, hazardous materials, parking lot runoff, noise, air pollution, and more. It is not the intent to summarily dismiss the Millbury Station related comments, but it is the intent to not devote any further effort toward resolving the potential impacts of a Millbury Station which is no longer proposed as a part of the

current Worcester Commuter Rail Extension project (please refer to letter from MBTA General Manager, Patrick J. Moynihan in Appendix D.) If at some future date a Millbury Station is reconsidered at any site, the MBTA will provide the Secretary an updated study including response to all comments raised on Millbury issues.

8.2 Individual Comments and Responses

In addition to the Secretary's Certificate, 98 comment letters were received on the November 1994 Draft EIR, 8 comment letters were received on the July 1995 Final EIR for Railroad Right-of-Way and Layover Facility and 21 comment letters plus 25 Flint Pond Residents letters were received on the March 1996 Final EIR for Millbury Station, Grafton Station and Railroad Operations.

The comment letters on the Draft EIR and on the July 1995 Final EIR were distributed as part of the March 1996 Final EIR in a separately-bound document, Appendix - Volume 1. The comment letters on the March 1996 Final EIR are included at the end of this section. The individual comment within each comment letter (The Secretary's Certificate has been designated as Comment Letter No. 1) have been numbered, i.e., Comment No. 13 in Letter No. 2 is called Comment 2-13. All comment letters are listed in this section of the document. The text of each individual comment and the response to the comment is at the end of this section.

The complete list of comment letters on the November 1994 Draft EIR, with the Secretary's Certificate designated as Comment Letter No. 1, is as follows:

MEPA Correspondence

1.	EOEA DEIR Certificate	3-16-95
2.	Citizens Advisory Committee Comments on DEIR	11-9-94

State Officials and Agencies

3.	MA Senate/Senator Matthew J. Amorello	3-9-95
4.	MA Senate/Senator Robert A. Durand	3-6-95
5.	House of Representatives/Harriette L. Chandler	3-7-95
6.	Department of Food and Agriculture/Marcia Starkey	3-6-95
7.	MA Historical Commission/Brona Simon	3-9-95
8.	DEP Central Region/Mary J. Richards	3-9-95

Regional Agencies and Organizations

9. Central MA Regional Planning/Carl Hellstrom	3-9-95
10. MA Restaurant Association	2-5-95
11. MA Audubon Society/E. Heidi Roddis	3-8-95
12. Bicycle Coalition of MA/John Allen	1-22-95
13. Metropolitan Area Planning Council/David Soule	2-28-95
14. METROWEST/Charles E. Gaffney	3-7-95
15. Assoc. for Public Transportation/Dennis Campbell	3-8-95
16. MASCO/Robert Tassinari	2-16-95

City Officials, Agencies and Organizations

17. MBTA Advisory Board Capital Planning Committee/Bernice Mader	3-8-95
18. Preservation Worcester/Patrice O'Malley Hagan	2-27-95
19. Worcester Office of Planning and Community Development/ Stephen F. O'Neil	2-24-95
20. Union Station Alliance	3-9-95
21. Andrew B. O'Donnell/Member Worcester Commuter Rail Task Force	3-9-95
22. Worcester City Manager's Office/Thomas Hoover & David Forsberg	3-13-95
23. Worcester Business Development Corporation/Thomas J. Andrews	3-9-95
24. Millbury MBTA Advisory Committee/Brennan F. Wall	2-1-95
25. Tufts University/Franklin M. Loew	2-24-95
26. Grafton Board of Selectmen	3-6-95
27. Southborough Board of Selectmen	3-7-95
28. Westborough School Committee/Lydia DaSilva	3-1-95
29. Westborough Planning Board/Richard Brady	2-21-95
30. Westborough Board of Selectmen	3-6-95
31. Westborough Police Department	2-27-95
32. Westborough Historical Commission	1-10-95
33. Westborough MBTA Advisory Committee	3-3-95
34. People for the Ashland West Alternative/John Kelly	2-17-95
35. Ashland Board of Selectmen	3-6-95
36. Ashland MBTA Rail Committee	3-9-95
37. Ashland Town Planner/Stephen Kerlin	3-9-95
38. Ashland Office of Selectmen and Town Manager	11-22-94
39. Framingham Planning Department	3-7-95
40. Hopkinton Office of the Selectmen	3-8-95
41. Hopkinton Appropriations Committee/John Woodward	3-8-95
42. Newton Department of Planning and Development	3-2-95
43. Wellesley Board of Selectmen	1-6-95
44. Boston Redevelopment Authority	3-6-95
45. Boston Environmental Department	3-8-95

Millbury - Citizen Comments

46. Brennan F. Wall	2-17-95

Grafton - Citizen Comments

47. Scott Rossiter	2-12-95

Westborough - Citizen Comments

48. Larry Gomes	2-24-95
49. Louis & Maureen Jankauskas	2-21-95
50. Mary Fisher	2-24-95
51. Mary Cullen	2-20-95
52. Stephen & Charlene Henry	2-24-95
53. Brian and Antoinette Kennedy	3-7-95
54. Mario Avelloni	3-3-95
55. E. Thomas and Judith McCabe	3-6-95
56. Sally Tajiani	3-5-95
57. Janice and Alan Silvestry	3-5-95
58. Rosemary Johnson	3-6-95
59. Diane Power	3-7-95
60. Dennis Cox	3-8-95
61. Jacqueline and David Cox	3-8-95
62. Robert Brais, Barbara Brais, Marie Brais	3-5-95
63. Dorothea MacLeod	3-6-95
64. Marvin Silver	3-7-95
65. Barbara Reismann	3-7-95
66. William and Mary Anne Coveney	3-6-95
67. Jane and Richard Dunphy	3-4-95
68. Joseph Orlando	2-20-95
69. Elizabeth Colbert	2-22-95
70. Joseph Harrington	2-14-95
71. Mrs. Paul Smith	2-21-95
72. Helen and Bill Panas	2-17-95
73. William Murphy	2-8-95
74. Jennifer Speed	3-7-95
75. Bruce Johnson	3-6-95
76. Cheryl and Paul Crivello	2-28-95
77. Susan Stager	2-26-95
78. Ellen Gugel	1-19-95
79. Barbara Sullivan and Fran Lynch	1-29-95

Southborough - Citizen Comments

80. Richard Fournier, Jr.	3-5-95
81. James Knowles	2-23-95
82. Peter Venuto	2-23-95
83. Patricia Pirozzi	2-14-95
84. James Waddell	2-14-95
85. Russell Fustino	10-4-94
86. Jane Fedorowicz and Michael Golibersuch	2-8-95
87. Anne Huff	1-8-95
88. Judith and Thomas Little	2-2-95

Ashland - Citizen Comments

89. Burnam's Supper House/Daniel Giargiari	3-3-95
90. Nelson Holden	3-6-95
91. Claudia Lefter for Nelson & Martha Holden	2-8-95
92. Citizens Lefter, Leacu, Camille, Holden	3-7-95
93. Ellen Giargiari	2-28-95

Hopkinton - Citizen Comments

94. John Woodward	1-6-95
95. Andrew and Teresa Boyce	2-2-95

Boston - Citizen Comments

96. Keith Davison	3-3-95

Unknown Communities - Citizen Comments

97. Dorothy McMahon	3-7-95
98. Jackie Adams	3-6-95
99. Julia McTigue Jacobs	---

The complete list of comment letters on the July 1995 Final EIR, with the Secretary's Certificate designated as Comment Letter No. 1, is as follows:

MEPA Correspondence

1. EOEA FEIR Certificate	9/14/95
2. Citizens Advisory Committee, Comments on FEIR	9/05/95

State Officials and Agencies

3.	Massachusetts Historical Commission/Brona Simon	9/06/95
4.	DEP Central Region/Mary J. Richards	8/31/95
5.	MHD District No. 3/Peter J. Donohue, P.E.	9/07/95

City Officials, Agencies and Organizations

6.	Southborough Board of Selectmen	9/06/95
7.	Worcester Office of Planning and Community Development/Stephen F. O'Neil	8/31/95

Grafton - Citizen Comments

8.	Lydia M. Bogar	9/06/95

Boston - Citizen Comments

9.	Keith K. Davison	9/07/95

The complete list of comment letters on the March 1996 Final EIR, with the Secretary's Certificate designated as Comment Letter No. 1, is as follows:

MEPA Correspondence

1.	EOEA FEIR Certificate	6/14/96

State Officials and Agencies

2.	MA Senate/Senator Matthew J. Amorello	6/5/96
3.	House of Representatives/Paul Kollios	6/4/96
4.	DCPO/Gina B. Dailey	5/13/96
5.	Department of Food and Agriculture/Marcia Starkey	6/4/96
6.	DEP Central Region/Andrea Lemerise	5/24/96
7.	MA Highway Department/Peter J. Donohue	6/6/96
8.	MA Historical Commission/Judith B. McDonough	6/7/96

Regional Agencies and Organizations

9.	MA Audubon Society/E. Heidi Roddis	6/6/96
10.	MetroWest Growth Management Committee/Kathleen B. Bartolini	6/7/96

City Officials, Agencies and Organizations

11. Worcester Office of Planning and Community Development/ Thomas R. Hoover	6/6/96
12. Worcester City Council/Paul P. Clancy, Jr.	5/31/96
13. Worcester City Council/Stephen T. Patton	5/31/96
14. Millbury MBTA Advisory Committee/Margaret A. Lavallee	6/3/96
15. Grafton Town Administrator/Daniel J. Morgado	6/4/96
16. Framingham Planning Department/David M. Kutner	6/7/96
17. Westborough Board of Selectmen/Joan M. Bentley	5/16/96
18. Ashland Town Manager/Dexter P. Blois	6/6/96
19. Southborough Planning Board/Charles E. Gaffney	6/7/96
20. Southborough Board of Selectmen/William J. Christensen	6/7/96
21. Boston Environment Department/Lorraine M. Downey	6/7/96

Boston - Citizen Comments

22. Keith K. Davison	6/7/96

Flint Pond Residents, et al

Kevin M. Maloney
Ronald J. Etre
Scott and Stella Smith
Mary Ann Maizel
Ronald and Donna Fitman
Mr. and Mrs. Charles Koch
Sharon M. Yager
Emily Harper
Tony and Laurie Mattero
Stephen J. Stepien
Jack Murphy
Peter Rodrigues and Kathy Russo
Beverly and Paul Campbell
Enzo P. Simmarano
Jerald and Deborah Dilorio
Laurie A. Murphy
Victoria A. Pellegrino
Kevin Parker
Mr. and Mrs. Paul G. LaMontagne
Julia Buduo
Paul Foley
Edmond J. Kelly
Judith A. Bonofiglio
Carol M. Fenlon

RESPONSE TO COMMENTS ON THE NOVEMBER 1994 DEIR

The following comments on the November 1994 DEIR are those contained in the March 1996 FEIR (Millbury Station, Grafton Station, Railroad Operations) for which responses were deferred for inclusion in FEIR #3 covering Westborough, Southborough, and Ashland Stations. The complete comment letters, from which these comments are taken, are contained in the March 1996 FEIR, Appendix - Volume I.

Comment Letter No. 1

EOEA DEIR Certificate (3/16/95)

Comment 1-26

"The FEIR should also respond to concerns expressed by the City of Boston with noise impacts in the Framingham-Boston corridor, and concerns that the noise standards used do not take into account background noise and cumulative impacts."

Response

Project noise impacts were evaluated using the proposed FTA noise impact criteria which address both relative and absolute noise level changes. Under the baseline conditions, there were 32 MBTA operations between Framingham and Boston. With Basic Service, MBTA operations will be 40. AMTRAK operations have decreased from 7 to 2, resulting in a net increase of 2 trains per day. Within Boston, the train corridor is adjacent to the Turnpike, and the added trains will results in only a minor increase in noise levels.

Comment 1-33

"I note that comments like those submitted on behalf of the Town of Westborough cannot be easily summarized; as provided in the MEPA regulations, those comments nonetheless require a Response in the FEIR."

Response

Westborough comments on the November 1994 Draft EIR from the School Committee, the Planning Board, the Board of Selectmen, the Police Department, the Historical Commission, the MBTA Advisory Committee and others were partially responded to in the March 1996 Final EIR. The balance of responses for those comments deferred to this document are included herein.

Comment 1-35

"The CAC and several commentors have concerns that traffic will be diverted and impacts worsened if adjacent stations are not developed within the same time frame. This issue needs to be considered in the FEIR."

Response

As currently scheduled, the Grafton Station will be operational in mid-1997. The Westborough, Southborough, and Ashland Stations should be in service prior to the end of 1997, all three planned for opening within 60 to 90 days of each other (as previously recommended by the towns).

Comment 1-38

Re: Ashland Station - "The CAC comment raises important issues concerning platform alignments and parking availability that need further evaluation."

Response

The platform alignment concern referred to the Ashland Station-East Alternative which is no longer under consideration. The Ashland Station-West, the current proposal, eliminates the platform alignment issues. The parking issues refer to the 200 northside spaces as being inadequate and thus resulting in parking spillover. As proposed, the parking will be a minimum of 200 (including some restaurant spaces) spaces north of the tracks and 500 spaces south of the tracks. The projected ridership in 1996, viewed by

geographical location of and access routes from Ashland, Holliston, Southborough, Hopkinton, and Upton, reveal that parking demand should be for 191 spaces on the north lot and 418 spaces in the south lot.

Comment 1-39

Re: Ashland Station- "It appears that the south parking lot access at Route 135 will have a significant impact. The Town of Ashland has recommended widening for designated turn lanes and signalization for safety. This should be evaluated in the FEIR."

Response

With in excess of 60% of the station traffic projected to use the south parking lot, left turns from the lot onto Route 135 will operate at LOS "E" in the morning and at LOS "F" in the evening. Corrective action is being proposed, and will include a traffic signal and turning lanes. Details have been discussed with local officials. See Section 7.12 of this document.

Comment 1-40

Re: Ashland Station- "There are also concerns with the intersections in Ashland that are at levels of service (LOS) D/F. Mitigation measures for these locations should also be considered."

Response

Each concern for both signalized and unsignalized intersections is addressed in Section 7.1 of this document. MBTA mitigation policy (See Section 2.8) considers that LOS "D" is acceptable for area roadways. Proposed mitigation for Ashland is presented in Section 7.12 of this Final EIR.

Comment 1-44

Re: Southborough Station - Commentors indicate that the pedestrian overpass is aesthetically out of character with the neighborhood. As an alternative, reactivation of the existing underpass has been proposed. The compatibility of the station design in the rural business district needs to be shown in the FEIR."

Response

The formerly proposed pedestrian overpass has been eliminated from the Southborough Station design. The existing underpass is totally inadequate and the MBTA does not normally propose new underpasses based on safety considerations. In lieu of an overpass, the reconstructed Route 85 railroad bridge will have expanded sidewalks connected to the station platforms via stairs and ramps.

Comment 1-45

Re: Southborough Station - "Closure of the median on Route 9 at Woodland Road has been reported to be held up because of the EIR review for the commuter rail project."

Response

The MBTA has no knowledge of a relationship between the Worcester rail project and the closure of a median opening on Route 9.

Comment 1-46

Re: Southborough Station - "... the CAC comment recommends that the proposed signal timing changes at Route 85/Southville Road be reviewed because this measure may not be sufficient to mitigate the traffic impacts."

Response

Recent and ongoing meetings with Southborough officials concluded that the Route 85/Southville Road intersection will be completely rebuilt and aligned with the roadway section from the new Route 85 railroad bridge. New traffic signals will be installed. See Section 6.12 of this document.

Comment 1-47

Re: Westborough Station - "Neighbors have raised concerns about noise impacts on homes and the neighborhood that deserve attention in the FEIR."

Response

Revised noise impacts of Basic Service to all stations were presented in FEIR #1, Railroad Right-of-Way and Layover Facility. The short term noise impacts resulting from service to Grafton and/or Millbury Stations only were addressed in FEIR #2. Noise impacts at Westborough, Southborough, and Ashland Stations have been updated in this Final EIR.

Comment 1-48

Re: Westborough Station - "Traffic volumes on Milk to Maynard Streets should be higher than indicated in the DEIR, and volumes on Fisher Street appear to be to low also. The traffic assumptions have been questioned by the CAC, the Town of Westborough municipal agencies and the MBTA Advisory Committee. Background growth does not appear to have been fully accounted for in the study and commuter route distribution has been questioned."

Response

The Westborough traffic concerns are addressed in Section 5.1 of this Final EIR and in Section 8.1, Response to Commonly Raised Questions. The 1996 "No Build" traffic volumes were developed using MHD data from five counting sites in Westborough. The growth rate was found to be quite low, at an average annual growth rate of 0.3 percent. One location on Route 9 had an average rate of negative 1.1 percent over a 3-year period.

Comment 1-49

Re: Westborough Station - "Safety issues at the key intersections have not been addressed to the satisfaction of commenters. Streets such as Arch Street are narrow and rural in character. However, these local streets have been impacted to a great degree by the development on Route 9 near Otis Street. These traffic and safety concerns warrant thoughtful consideration in the FEIR."

Response

Arch Street, although restricted by a narrow bridge, is not projected to be a significant path of travel related to the Westborough Station. Routing of station traffic assumed that patrons from communities outside of Westborough would use the shortest travel time and/or distance from population centers. It is expected that some Westborough patrons will use local streets, including Arch Street.

Comment 1-51

"The town has raised a concern that no impact assessment of the three stations in Wellesley has been provided in the DEIR. The town has specific safety concerns."

Response

The Wellesley Stations are, and have been, on the existing Framingham Commuter Line for a good number of years. The potential impacts due to the Worcester Commuter Rail Extension are considered to be minimal. Improvements, including warning signals and signs, will be part of another program.

Comment Letter No. 2

Citizens Advisory Committee Comments on DEIR (11/9/94)

Comment 2-11

"The construction of the new access drives/driveways to the commuter parking lots at the rail stations should not create new intersection traffic problems. Thus the access drives on Route 122, Megunko Road and River Street need further study in the FEIR. A 1996 LOS D for a new intersection is not acceptable. New construction should be designed to a higher standard, C or better."

Response

The Route 122 Millbury Station is no longer under consideration; a recent decision determined that no Millbury Station would be built under the current program. At one time, for the Ashland Station-East which is no longer under consideration, Megunko Road might have provided a temporary station driveway to the south parking lot. The River Street driveway to the Southborough Station south lot is projected to operate at LOS "C" in the morning and LOS "D" in the evenings for left and right turn movements out of the driveway. Traffic turning into the driveway from River Street will operate at LOS "A" for both morning and evening.

Comment 2-19

"The statement that 'The (Westborough MBTA Advisory) Committee expressed preference for the Smith Valve Parkway site' needs to be clarified. The Westborough MBTA Advisory Committee is charged to advise the Westborough Board of Selectmen, not the MBTA, and did not make the ultimate decision on preferred station location. The Westborough Board of Selectmen did not approve site selection at Smith Valve Parkway and has restated its position in support of a regional station somewhere in the vicinity of Interstate 495 and the Mass Pike."

Response

See Response to Commonly Raised Questions (re: Regional Station) in Section 8.1 of this document.

Comment 2-29

"The CAC requests all roadway improvements create bike path lanes, e.g., Southborough Station to Hopkinton State Park. FEIR should detail what the MBTA plans are for improved bike access to their stations."

Response

All proposed commuter stations will have bicycle racks and welcomes bicyclists to use bicycles instead of automobiles to travel to and from the train stations. Although designated bicycle paths to the Hopkinton State Park are not planned, a combination path/sidewalk is now proposed from the station south parking lot to the Hopkinton State Park. See Section 6.10 and 6.12 of this Final EIR.

Comment 2-76

"The CAC acknowledges there are specific questions pertaining to the traffic dispersion model (and how it was applied) at this Westborough site, specifically the traffic projections for Fisher and Maynard Streets. MBTA officials should work closely with Westborough to reconsider the assumptions in the traffic model and to rerun this model if necessary (e.g., conduct traffic counts at Maynard St./Rt. 135)."

Response

See Response to Commonly Raised Questions (Re: Local Street Traffic) in Section 8.1 of this document. Some specifics of Maynard Street traffic versus patrons arriving for each of the morning trains are included. For patrons from communities outside of Westborough, routing was based consistently on using the shortest travel time and/or distance from population centers.

Comment 2-77

"The CAC has received an update from MBTA stating that Westborough and Southborough will now have sidewalks; however, the location of these is uncertain. The FEIR should state where these sidewalks will be located, the number of linear feet and any increases in site development budget."

Response

Sidewalks in Westborough and Southborough are planned in the immediate station areas and on various streets leading to the stations. See Sections 5.10 and 5.12 for Westborough and Sections 6.10 and 6.12 for Southborough in this Final EIR.

Comment 2-78

"Based upon recalibration of the traffic model (as described above), if traffic increases are shown to occur on Fisher and Maynard Streets, then air quality tests should be performed for residences and the schools along Fisher Street, due to vehicles using this area as a shortcut to reach Smith Valve Station."

Response

The DEIR evaluated air quality at the Route 9/Otis Street intersection, and determined CO levels to be well below the 1-hour and 8-hour standards. CO levels at other intersections and on local roads in Westborough would be even lower than those calculated at Route 9. Any redistribution of station traffic would have no significant effects on local air quality.

Comment 2-79

"The scope for the DEIR told the MBTA to address how the Southborough station should fit into the character of the rural village business district and how the granite bridge would be maintained as a gateway to Southborough. Neither issue is covered at all in this DEIR. Both need detailed discussion in the FEIR."

Response

In response to the towns concerns, the MBTA is proposing to eliminate the pedestrian overpass at the Southborough Station and provide a widened sidewalk as part of the Route 85 Bridge reconstruction to allow for pedestrian crossings under the tracks. The Route 85 Bridge reconstruction contract includes granite faced abutments and wingwalls in an attempt to maintain the existing character of the area.

Comment 2-80

"CAC does not agree with the DEIR projection that 50% of the Upton train riders already use Southborough as their route to the Mass Pike. To save time, Upton uses I-495 to the 11a entrance to Mass Pike. Traffic impacts resulting directly from the station should be adjusted upward in the FEIR."

Response

The traffic analysis in Section 6.1 of this document no longer takes the 50% credit used in the DEIR. In addition, the revised CTPS ridership projections for Southborough Station show a significant decrease in Kiss'n'Ride patrons from 83 to 41, thus reducing many of the double station trips.

Comment 2-81

"Based on its field trip to all proposed station sites, the CAC supports a recreation and landscaping project for Mill Pond, the Sudbury River, and Stone Arch Bridge in Southborough. However, the DEIR gives no more than a couple of sentences to this topic. The FEIR should offer more detail."

Response

The proposed Southborough Station plans include construction of a stone dust walkway across the Stone Arch Bridge over the Sudbury River connecting the station to Route 85 near the Hopkington State Park. Extensive landscaping around the station site is also proposed in an effort to promote utilization of the site by residents during non-commuter times.

Comment 2-82

"It has been agreed that sidewalks will be built in the proximity of Southborough Station as well as on the station site. This station has a high potential to serve Hopkinton State Park. Thus, the sidewalks exiting onto Route 85 at the new access driveway should provide crosswalks to get park users on the right side of Route 85. The crosswalks may also need pedestrian lights to assist safe crossings during peak hours."

Response

See Response to Comments 2-29 and 2-77. Pedestrian crossing lights are not proposed as part of the proposed sidewalks to the Hopkinton State Park. Advance warning signs will be installed.

Comment 2-83

"CAC supports Southborough in strongly disagreeing with the supposition that traffic problems at the Route 85/Southville Road intersection can be remedied by merely retiming the existing traffic signal. Instead of debating this, CAC requests that the MBTA petition MHD District 3 *now* to retime these lights and then conduct additional, comparative analysis in the FEIR. Since the Route 85 bridge has been closed, traffic patterns have changed. MBTA should coordinate with Southborough how to address this issue in the recommended signal timing experiment."

Response

In conjunction with the Route 85 railroad bridge replacement project, and the recently agreed to closing of Cordaville Road between River Street and Southville Road, the

Route 85/Southville Road intersection will be completely reconstructed, including turning lanes and a new traffic signal system.

Comment 2-84

"DEIR shows 200 parking space capacity in Ashland, on the north side of tracks. Parking spillover is likely. Thus, the town would resort to restricted on-street parking between certain hours and also implement a "tag and tow" policy for controlling any parking lot spillover. The CAC requests a reevaluation of the proposed 200 parking spaces on the north side of the tracks."

Response

The revised CTPS ridership projections for Ashland Station totals 770 patrons in 1996. The parking demand will be for 610± spaces. Based on town of origin and routing to the two station parking lots (See Figure 7.1-4), 31.4% (191 parking demand) would be destined for the north side lot and 68.6% (418 parking demand) to the south side lot.

Comment 2-85

"The proposed Ashland West alternative is shown to have floodplain and some wetland. One potential solution is to break up the parcel into smaller *dry* parking lots (similar to West Natick) to avoid any wetland impact."

Response

The proposed Ashland Station West Alternative is located in an area where wetland impacts cannot be avoided. The original station design proposed the alteration of approximately 2 acres of wetlands. The site has been reconfigured and redesigned to minimize wetland impacts to the maximum extent possible. The current Ashland Station design proposes the alteration of approximately 38,000 square feet of wetlands, including alterations associated with the proposed access drive to Rte. 135. Any displacement of flood plain on the north side parking lot will be compensated for.

Comment 2-86

"Traffic approach and dispersion for the Ashland West alternative is somewhat problematic, given current road and bridge configuration at Pleasant and High St.. How does the proponent plan to address this?"

Response

All analyses consider that the High Street bridge is open to traffic even though no station-bound traffic is projected for High Street. But a major difference from the Ashland West Alternative compared to the current Ashland Station (north side) is that the one station driveway is located on Pleasant Street, thus eliminating station traffic turns on and off High Street. See Section 7.1 of this Final EIR.

Comment 2-87

"The proposed access road to either East or West alternative [Ashland] from Route 135 would require signalization/integration with existing Route 135 signals. This must be addressed in the FEIR."

Response

A traffic signal is proposed for Route 135 at the driveway to the south side station parking. See Section 7.12 of this Final EIR.

Comment 2-88

"CAC has a policy statement that sidewalks would be required at all rail stations to link them to pedestrians. Under the "west" alternative, DEIR does not indicate that Ashland needs them for access across the Cordaville Rd./Pleasant St.. bridge and as appropriate elsewhere."

Response

Based on recent meetings with town officials, sidewalks are planned on Cordaville Road, Pleasant Street and High Street. Sidewalks across the Cordaville Road/Pleasant Street bridge will be incorporated into a reconstructed bridge under a future Massachusetts Highway Department project.

Comment 2-89

"We request MBTA consider breaking the proposed south lot [Ashland] into parcels (much like the West Natick MBTA lot)."

Response

See Response to Comment 2-85.

Comment 2-92

"Information regarding Fountainhead Plaza Project is erroneous and out of date. Permits have been obtained for construction of a WalMart at that location. This project is progressing, and it is reasonable to expect that it would be completed by late 1996. The WalMart project needs to be included in both the 2001 and 1996 'No Build' traffic projections."

Response

The information in the comment is correct. Since publication of the November 1994 DEIR, the new Walmart has opened for business. Specific traffic for the Walmart facility has now been included in the traffic analysis in Section 5.1 of this document.

Comment Letter No. 8

DEP Central Region/Mary J. Richards (3/9/95)

Comment 8-24

"It is stated in the DEIR on page 14-31 that the station site does lie within the Zone B contributing watershed area of the Andrews and Wilkinson wells as depicted in Figure 14.4-1. Two types of aquifer and direct recharge areas, A-1 and A-2, are also depicted on Figure 14.4-1 (attached). However, none of these terms were defined in the DEIR and they do not match current water supply definitions. Apparently, the source of this information is from the Westborough Aquifer and Watershed Protection District's map completed by SEA Consultants in 1986. If this information is to be included in the Final EIR, these terms need to be defined, however, it would be more appropriate to use recent water supply terminology, especially since these wells have an approved Zone II."

Response

The latest version of the Westborough Aquifer and Watershed Protection District map is utilized in Section 5.4 of this FEIR.

Comment 8-25

"It is stated in the DEIR that the quality or quantity of the recharged groundwater is not expected to change as result of the station site. A more complete explanation should be provided. The quality and perhaps the quantity will be affected if the site is within the Zone B contributing watershed area. What precautions will be taken to prevent pollution from the parking lot (stockpiled snow, salt, oils, metals, etc.) from contaminating the groundwater? Are herbicides being applied to the trackbed in this area as well?"

Response

See Section 5.4 of this FEIR for a detailed description of these issues. The potential impacts from herbicide use along the tracks is discussed in Section 4.5 of FEIR #2 and identified in the Vegetation Management Plan (VMP) and the Yearly Operating Plan (YOP) included in Appendix E of FEIR #2.

Comment 8-26

"The railbed is approximately one half mile from Saddle Hill Country Club, a registered non-community public water system located in Hopkinton. The railbed and proposed station site are 0.25 miles from Carbone's Restaurant, a registered non-community public water system in Hopkinton. Is the proponent aware of these public water systems?"

Response

The Sudbury River lies between the proposed Southborough Station Site and existing homes, clubs, and businesses in Hopkinton. In addition, the river is approximately 20 feet below the station site and these Hopkinton areas. Stormwater drainage from the proposed site work will flow in a southerly direction towards the river and easterly along the river, but is not expected to flow upgradient into Hopkinton beyond and south of the river.

Comment 8-27

"The proposed station site is adjacent to an area of Hopkinton that is served by private wells. Benzene, toluene and acetone were detected in soil samples from the proposed station site, however, these have not been confirmed. Determine if there is a potential for impacts from the site work and stormwater drainage from the station site to these private wells. Could the homes served by these wells be connected to public water if necessary."

Response

See Response to Comment 8-26.

Comment Letter No. 14

METROWEST/Charles E. Gaffney (3/7/95)

Comment 14-14

"It is also important that the Southborough Station enable bikers and pedestrians to access Hopkinton State Park. This is a state-funded recreational facility within ½ mile of the proposed station. The FEIR should address how MBTA actions will improve accessibility to this site."

Response

See Response to Comment 2-29.

Comment 14-17

"The FEIR should supply a Nyanza siting option that allows current businesses to remain. Ashland cannot afford such a loss of property taxes."

Response

The Ashland Station-East presented in the November 1994 Draft EIR is no longer under consideration. The currently proposed Ashland Station (See Section 7.0) does not displace the businesses in question, but the proposed north side parking lot will displace a one-story, wood-frame office building.

Comment 14-18

"The ENF for Interim Service did not include an evening express stop in West Natick, however, in January one was implemented. West Natick already has severe parking shortages and did not need improved train service prior to new parking. Why encourage more ridership at a station that cannot handle what it has? This change from the ENF should have at a minimum been discussed with the town of Natick and the CAC."

Response

The West Natick Station is now handicapped accessible, which is a primary reason for the express stop. Until Framingham Station is made accessible, West Natick will continue to be an express stop.

Comment Letter No. 27

Southborough Board of Selectmen (3/7/95)

Comment 27-1

"We want a regional station instead of local stations. Do not build local stations by 1996, but rather put the Regional station on-line first, then smaller local stations if needed."

Response

See Response to Commonly Raised Questions (re: Regional Station) in Section 8.1 of this document. Also see Section 2.4 (Regional Station Feasibility Study).

Comment 27-2

"Undoubtedly the ACEC status of Cedar Swamp presents a problem for citing a Regional Station, but positive, creative solutions may yet be found if really desired. The FEIR should continue to look at regional station options and not drop the topic as proposed in the DEIR."

Response

See Response to Commonly Raised Questions (re: Regional Station) in Section 8.1 of this document.

Comment 27-3

"Southborough recommends that the MBTA redesign the Mass Turnpike/I-495 site to resolve access and wetlands problems. Given the new "state control" orientation in Washington, it may be possible to get a waiver for site access directly off of a turnpike ramp or closer than one mile apart from existing exits. Much more attention is needed in this area."

Response

See Response to Commonly Raised Questions (re: Regional Station) in Section 8.1 of this document.

Comment 27-5

"Town desires to sign a legally binding agreement with the MBTA that stipulates that 420 spaces is the maximum number to be located at this site, unless the Town petitions the MBTA for an expansion."

Response

The MBTA does not enter into such legally binding agreements. When and if expansion of the parking is considered, the MBTA will negotiate any pertinent terms with the Town of Southborough, report the change to MEPA if required, and carry out any further needed review.

Comment 27-6

"Town wants to be on record as having interest in maintaining and policing north parking lot, in order to establish a "resident parking only" area. This will also help alleviate traffic problems along Southville Road. by decreasing the number entering/exiting north lot."

Response

Restricted resident only parking cannot be constructed by the MBTA. The general public will have access to all parking spaces constructed by the MBTA, both north and south of the tracks.

Comment 27-11

"It is the unanimous position of this Committee that there should not be a pedestrian overpass at this site [Southborough Station.] "We remain committed to either of two options."

Response

The currently proposed Southborough Station will not include a pedestrian overpass. Access across the tracks to station platforms will be via the new, wide sidewalk under the reconstructed Route 85 railroad bridge.

Comment 27-13

"The FEIR should clearly state where sidewalks will be extended, width curbing, etc. The Town wishes to reiterate our previously filed list of where we desire sidewalks. This list is attached to this Comment Letter."

Response

Recent meetings with town officials concluded that approximately 9,500 feet of sidewalks will be constructed on various roadways in the vicinity of the Southborough Station. See Sections 6.10 and 6.12 of this Final EIR.

Comment 27-14

"It has been agreed that sidewalks will be built in the proximity of, as well as on, the station site. This station has a high potential to service Hopkinton State Park. Thus, the sidewalks exiting onto Route 85 at the new access driveway should provide crosswalks to get park users on the right side of Route 85. These crosswalks may also need pedestrian lights to assist safe crossings during peak hours."

Response

See Response to Comment 2-82.

Comment 27-15

"Pedestrian activated traffic signals will be needed at Route 85/Southville Road intersection and crosswalks will be required to help people cross Southville Road to access the station and General Store."

Response

See Response to Comment 2-83. The appropriate pedestrian phases will be included as part of the new traffic signal system proposed for the intersection.

Comment 27-16

"The Town strongly disagrees with the supposition that traffic problems at the Route 85/Southville Road intersection can be remedied by merely re-timing existing traffic signal. Instead of arguing about this, we request that the MBTA petition MHD District 3

now to retime these lights, and then conduct additional, comparative analysis in the FEIR."

Response

See Response to Comment 2-83.

Comment 27-17

"Southborough does not agree with your projection that 50% of the Upton train riders already use Southborough as their route to the Mass Pike (p.15-11). To save time, Upton uses I-495 to the 11A entrance to Mass Pike. Traffic impacts resulting directly from the station should be adjusted upward in the FEIR."

Response

See Response to Comment 2-80.

Comment 27-18

"Southborough Study Group wants to be on record as supporting traffic mitigation at Route 85/30 intersection, assuming it can be achieved without forfeiting town character. This scenic intersection defines Southborough, it is here as opposed to our Business Center, that artists depict Southborough. Thus modifications, although sorely needed, must be designed carefully."

Response

Although station-related traffic does effect the northbound and westbound approaches in the A.M. peak hours, the overall intersection will operate at an acceptable level of service in 1996 for the P.M. peak hours. By the year 2001, the A.M. peak hours degrade to LOS "F", but this condition would have occurred without the station traffic. The DEIR suggested that improvements could be made on Route 85 only, but that it would be more appropriate to add left turn lanes on all legs of the intersection and a new signal system. The improvements would include land acquisition, tree removal, grading and drainage impacts. Indeed, the rural character of the location would be forfeited. Since no credit was taken for cars going through the intersection to access Route 9 who would now go to the Southborough Station (all station traffic was considered as new traffic), double counting could have overestimated the impacts. The MBTA suggests that the

current signal system should be analyzed and retimed and the situation be monitored with the assistance of the MHD after the opening of the Southborough Station.

Comment 27-19

"The Town offers a suggestion regarding LOS problems at the intersection of Route 85 and Southville Road, especially if Cordaville Road is shut off at River Street, as requested. It has been suggested that a right hand turn lane could be cut into existing vegetated triangle to decrease queue on Route 85 southbound. The FEIR should analyze this option in conjunction with the short leg of Cordaville Road being closed."

Response

As currently proposed, the short section of Cordaville Road will be closed. The proposed new signalized intersection will include left turn lanes on all legs.

Comment 27-20

"The DEIR measures traffic impact in terms of LOS decreases only. We believe intensity and duration of impacts are an issue. The DEIR clearly shows that our peak traffic hour will be extended by the station's peak generator hours in both morning and evenings. The time frame nearly doubles in the evening and will be very disruptive in this rural residential area."

Response

Traffic analyses were performed for both peak hour and peak generator hour, which address the issues of intensity and duration. The Build and No-Build volumes given in the Appendix-Volume I of the November 1994 DEIR show that in 1996 at the Southville Road/River Street intersection, for example, existing volumes during the peak generator hour are more than 80% of peak hour volumes. The afternoon "rush hour" already extends beyond the 4:45 to 5:45 peak, and is not being extended by station traffic. While station traffic will add to existing volumes during both the peak hour and peak generator hour, the largest percentage of station traffic occurs after the peak hour, and results in a lesser impact on level of service.

Comment 27-21

"The access drive for the south parking lot must be better defined in the FEIR. We have concerns about both: (1) left turn of northbound a.m. traffic into lot and (2) left turn out of driveway due to bridge abutment obstructing views. FEIR should also address, as previously scoped, how the bridge widening will occur without impacting on historic character of the bridge. The bridge should remain granite and not a concrete retaining wall."

Response

The proposed Route 85 bridge will have a longer span, placing the new abutments further back from the edge of roadway. Sight distance south of the bridge, in the vicinity of the station driveway, will be improved considerably. The new bridge abutments will be constructed with granite block facing to retain the historic character.

Comment 27-22

"We reiterate our request for all roadway improvements to create bike path lanes, particularly to extend our existing one from Richards Road to Hopkinton State Park or even Hopkinton Center. FEIR should explain in detail just what the MBTA plans are for improved bike access to their stations."

Response

The MBTA provides bike racks at all commuter stations and welcomes bicyclists to use bicycles instead of automobiles to travel to and from the train stations. See Response to Comment 2-29 regarding proposed sidewalks.

Comment 27-23

"Site Plan in DEIR fails to address bike usage onsite or on train. We request bike lockers at this station."

Response

The Southborough Station will include bike racks, but bike lockers are not currently proposed. The transport of bicycles on the commuter trains is allowed.

Comment 27-31

"The MEPA Scope stipulated that station design should reflect "Village Business" character as articulated in our zoning. Thirty foot high light posts have never been allowed anywhere in Town, not even our Industrial Parks, let alone Village Districts. The maximum height is twenty feet."

Response

The MBTA intends to design lighting compatible with the Southborough zoning laws regarding the height of light poles. The 20-foot height limitation will necessitate an increase in the number of poles in order to attain the desired light intensity.

Comment 27-33

"The Town continues to request that since your plans require General Store to re-orient parking and store entrance to east side of lot, then the MBTA should provide that parking and new entrance. The FEIR should explain how this will be mitigated."

Response

The relocation of parking for the General Store will be constructed under the Southborough Station contract. Due to the agreed widening and reconstruction of the Route 85 and Southville Road intersection, a separate driveway for the General Store may not be possible. The MBTA has committed to a mutually acceptable separation of parking as design progresses.

Comment Letter No. 28

Westborough School Committee/Lydia DaSilva (3/1/95)

Comment 28-1

"We are concerned about the impact which the traffic heading to and from a MBTA parking lot will have on the safety of the children walking or being transported to and from the schools. One of the major roads leading to the schools, Maynard Street, is a very narrow street with no sidewalks. Maynard Street currently has a large automobile and truck traffic volume and is used as a shortcut to Route No. 9 by morning commuters. In addition to the students walking to these two schools, there are a number of students waiting to be bussed to their individual schools along many narrow streets leading to Fisher Street. Many of these students are of elementary school age, Kindergarten - Grade 4."

Response

The MBTA is concerned also for pedestrian safety, especially for young students. Although we still maintain that station-related traffic on Maynard and Fisher Streets will be minor (See Response to Commonly Raised Questions, Section 8.1 of this document) recent meetings held with Westborough officials have resulted in a commitment to install sidewalks on the portion of Fisher Street that has none, and on Smith Valve Parkway and Otis Street (See Sections 5.10 and 5.12 of this document).

Comment 28-2

"In its previous letter to you dated September 18, 1992, the Westborough School Committee established some safety priorities and requested that you consider the following concerns:

- Reduce the size of the lot from 600 to 300 cars;"

Response

The Westborough Station will provide a maximum of 300 parking spaces.

The Environmental Notification Form (ENF) for this project, filed in August 1992, included a Westborough Station with a proposed parking lot of approximately 600 spaces. The DEIR filed in November 1994 reflected the updated CTPS rail ridership projections and projected 216 commuters at a Westborough Station. As such, the DEIR

and all subsequent documents (including the FEIR) have proposed a Westborough Station consisting of a maximum of 300 parking spaces.

Comment 28-3

"In its previous letter to you dated September 18, 1992, the Westborough School Committee established some safety priorities and requested that you consider the following concerns:

- Improve the sidewalks and crosswalks in the location between the lot and the neighborhoods surrounding the schools;"

Response

See Response to Comment 2-77.

Comment 28-4

"In its previous letter to you dated September 18, 1992, the Westborough School Committee established some safety priorities and requested that you consider the following concerns:

- provide funds to offset the cost of any additional crossing guards or bus routes which are deemed necessary to ensure the safe transportation of our children."

Response

The additional traffic does not warrant additional crossing guards nor additional bus routes. See Response to Commonly Raised Questions (re: local street traffic) in Section 8.1 of this document.

Comment Letter No. 29

Westborough Planning Board/Richard Brady (2/21/95)

Comment 29-2

"We feel that some critical issues, including identifying potential access routes, were not adequately addressed."

Response

See Response to Commonly Raised Questions (re: local street traffic) in Section 8.1 of this document.

Comment 29-3

"The Board believes that local mitigation expenses will be significant and that the possibilities for construction of a regional station should receive substantially more consideration and investigation."

Response

See Response to Commonly Raised Questions (re: Regional Station) in Section 8.1 of this document.

Comment 29-4

"Even with significantly more riders originating from surrounding towns (Northboro, Upton, Shrewsbury), how does this ridership [22 riders from Westborough] justify locating a station in Westborough in light of potential local mitigation costs?"

Response

The project is a regional improvement, using an existing and active rail line. Each local station is expected to draw patrons from several communities near the host community, as well as from the host community itself. The revised CTPS ridership projections now show 42 Westborough residents using the Westborough Station. Support for local station was expressed at the 1996 Town Elections (61% in response to "Do you support a local commuter rail station in Westborough?"). Sidewalk costs are not expected to be onerous.

Comment 29-5

"How are the access issues for Westborough and surrounding user towns better addressed with a local station as compared to a regional stations?"

Response

See Response to Commonly Raised Questions (re: Regional Station) in Section 8.1 of this document.

Comment 29-7

"Future development plans in Westborough along Route. 9 (WalMart and a new shopping center proposal at the intersection of Route. 9 and Milk Street/Route 135) will impact the level of service provided at key intersections targeted along access routes to the Smith Valve Site."

Response

The Walmart traffic effects have been factored in to the Route 9/Otis Street intersection. A relatively conservative background growth factor was applied to establish the 1996 and 2001 traffic conditions. The background traffic growth should adequately address the effects of potential development on Route 9 within the time frame of the traffic analyses.

Comment 29-8

"Given that the Otis Street Route. 9 intersection is currently at failure and even with an improved turning lane onto Otis Street, commuter traffic is most likely to seek the shortest routes with least stopping time."

Response

Since publication of the November 1994 DEIR and the comment above dated February 2, 1995, the MHD has completed improvements at the Otis Street/Route 9 intersection. With the Walmart traffic included, the intersection will operate at a LOS "C" in the A.M. peak hours and a LOS "D" in the P.M. peak hours. Addition of station traffic will not impact intersection LOS significantly.

Comment 29-9

"Traffic from Shrewsbury is likely to travel Walnut Street to Gleason Street. Northborough commuters can be expected to travel Route. 135/Milk Street to Maynard Street. Traffic from Upton and Westborough is likely across West Main, Mill Road, and Fisher Street. Additional in-town traffic is likely across School Street, Milk Street, Maynard Street, and Fisher Street."

Response

See Response to Commonly Raised Questions (re: local street traffic) in Section 8.1 of this document.

Comment 29-10

"Since the proposed station for the Town of Southborough will have parking constraints, Westborough will realize a large portion of Southborough ridership."

Response

Most of the ridership to Southborough Station is projected to come from Southborough, Marlborough, Upton, Westborough, and Hopkinton. Since Southborough will be parking constrained, some trips would be diverted to the Ashland Station. Westborough Station would not experience a significant increase in trips, because for those living in Southborough and Hopkinton, going to Westborough Station would involve making a reverse trip. Based on past passenger surveys, commuter rail users seldom prefer to make reverse trips.

Comment 29-11

"The MBTA study overlooked the major possibility of commuter pass-through traffic across Maynard Street. Maynard Street is one of the most direct routes to the Smith Valve station. This is a country road. In its present state, it is not capable of safely handling peak hour commuter traffic. The road width, site distances, and lack of roadway shoulders will not be suitable for fast moving commuters. In addition, the street presently includes an old bridge which is not passable to 2-way traffic."

Response

See Response to Commonly Raised Questions, (re: local street traffic) in Section 8.1 of this document. Also, the MBTA did evaluate the possibility of station traffic utilizing Maynard Street. The Westborough Planning Board, in the above comment, outlines some of the very reasons why this route will not be attractive for station traffic.

Comment 29-12

"The assumption that residential streets would only experience local traffic is naive at best. The EIR's statement that no 'new' traffic would be generated on Fisher Street is very hard to believe in light of the travel pattern stated above."

Response

See Response to Commonly Raised Questions (re: local street traffic) in Section 8.1 of this document.

Comment 29-15

"At the very least, Fisher Street will require upgrading including widening and possibly sidewalks. In addition, the development of a 120 unit apartment complex at Fisher Street and Gleason Street may generate walking traffic to the proposed station. This may also require sidewalks to protect public safety."

Response

See Response to Comment 2-77.

Comment 29-17

"Will the Town of Westborough be responsible for these possible mitigation costs?"

Response

The construction of sidewalks on Westborough Streets leading to the proposed commuter station (see Section 5.10 and 5.12) will be funded by the MBTA.

Comment 29-23

"Without a regional station, and with parking constraints at the Southborough location, Ashland will likely become a regional station (EIR, p. 17-4). This scenario places still further strain on local streets in Ashland. What are the local mitigation costs?"

Response

The revised CTPS ridership projections for the Ashland Station are for 770 patrons in 1996, growing to 1,085 patrons in 2011. Ashland will be the most popular intermediate station on the line due in part to patrons from towns which now use the Framingham Station. Impacts on local streets in Ashland, including mitigation to be provided by the MBTA, are presented in Sections 7.1 and 7.12 of this document.

Comment Letter No. 30

Westborough Board Selectmen (3/6/95)

Comment 30-1

"The Selectmen do not believe that this DEIR addresses the major concerns that the Town of Westborough has about traffic generated, including the deterioration of level of service on Route 9-Otis Street and on local access Routes."

Response

The station related traffic projected to travel through the Route 9/Otis Street intersection will not affect significantly the level of service of the intersection. Regarding local street traffic see Response to Commonly Raised Questions in Section 8.1 of this document.

Comment 30-2

"We are also concerned about safety and liability issues and the lack of mitigation. The Board believes that a station at Smith Valve Parkway will have substantial negative impact on the Town's roads and neighborhoods, yet no mitigation has been proposed by the MBTA. Noise and vibration abatements, road widening, sidewalks for school children, relocating utility lines, and the widening of railroad bridges must be addressed through mitigation proposals from the MBTA."

Response

Proposed mitigation is presented in Section 5.12 of this Final EIR. Traffic on local streets is not projected to result in any significant adverse effects, but sidewalks are proposed as station-related enhancements. The electrical utility lines located along the south side of the railroad are currently the subject of discussions with the utility company regarding the relocation/consolidation of the lines. Bridges on Arch and Maynard Streets do provide a narrow opening for local street traffic, but the bridges are structurally sound and will not be rehabilitated or replaced as part of this project.

Comment 30-4

"We therefore request that EOEA request a project deadline extension for a regional station alternative as outlined and permitted the U Transit System Improvements (310 CMR 7.36), section 3: Project Delays and Project Deadline Extension.

The extension would apply to 310 CMR 7.36, section 2(3c)."

Response

The MBTA has studied at least seven alternative sites for a regional station. The conclusion, presented in the Regional Station Feasibility Study (January 10, 1996) was that no alternative is feasible in terms of overall environmental issues and cost effectiveness. The 1996 Westborough Town Elections produced a vote strongly in favor of a local station versus a regional station, and a clear preference for the Smith Valve Parkway site. The MBTA intends to proceed with the Smith Valve Parkway local station (see Appendix B which has the Executive Summary from the Regional Station Feasibility Study).

Comment 30-5

"We suggest that the feasibility study weigh a regional station as compared to all five local stations in light of:

- total costs including all mitigation costs in the five towns hosting a local station
- additional ridership from Marlborough, Northborough, Shrewsbury, Upton, and Hopkinton, considering new residential and commercial growth
- traffic, safety, and liability impacts of access routes on major highways vs. through local neighborhoods
- environmental impacts, including noise, vibration, liability, and safety issues for regional and local stations, based on the five towns' comments to the DEIR."

Response

See response to comment 30-4.

Comment Letter No. 32

Westborough Historical Commission (1/10/95)

Comment 32-1

"Table 7.8-1, page 7-73 errors exist in column, 'Potential Eligibility': 11 Maynard Street is not listed as an historic property and it is eligible."

Response

Please refer to Appendix H - Historic and Archaeological Resources in the March 1996 Final EIR. This Appendix contains information on historic structures and archaeological resources methodology and research methods. In addition, a Memorandum of Agreement between the MBTA and the MHC is also included. A complete Historic Properties Survey has been submitted to the MHC (Volume II - Historic Properties Survey for the Right-of-Way of the Worcester Commuter Rail Extension, April 1996). The report includes those Westborough structures that are potentially historic -- either singly or in an historic area or district -- and that may be affected by the project. The Westborough

Station site intensive archaeological survey has been completed. No significant historic or prehistoric resources were recovered from the site.

The 11 Maynard Street property, although of historic value, is beyond our coverage area and not in a historic district that would have expanded our zone of coverage.

Comment 32-2

"Table 7.8-1, page 7-73 errors exist in column, 'Potential Eligibility': 59 Fisher Street is not listed as an historic property and it is eligible."

Response

See Response to Comment 32-1. The 59 Fisher Street property is also beyond our coverage area.

Comment 32-3

"73, 79, 99, 138 & 143 Fisher Street (see attached) are documented in our Westborough Survey Forms and all potentially eligible."

Response

See Response to Comment 32-1. The properties at 73, 79, 99, 138 and 143 Fisher Street, although potentially eligible as historic properties, are also beyond our coverage area.

Comment 32-6

"Archaeological Resources: Our findings at sites: Charlestown Meadows, Hoccomocco, and Astra, all within proximity or adjacent to the Westborough MBTA Station have documented and substantiated the Middle and Archaic periods existing 3,000 to 8,000 years ago. We understand that 'Timelines' has done a survey of these area impacted; however to date, the report has not been made available to the Massachusetts Historical Commission or our Commission."

Response

The intensive archaeological survey for the Westborough Station site has been completed. No significant historic or prehistoric resources were recovered from the site.

Comment Letter No. 33

Westborough MBTA Advisory Commission (3/3/95)

Comment 33-4

"The DEIR's statement that 'The (Westborough MBTA Advisory) Committee expressed a preference for the Smith Valve Parkway site' needs to be clarified. (SECTION 1.0 PROJECT OVERVIEW: HISTORY OF THE PROJECT, pg. 1-35.)"

Response

The MBTA is aware that the stated site preference should have been made directly by the Board of Selectmen, likely using information supplied by the Westborough MBTA Advisory Committee. Since publication of the November 1994 DEIR and the issuance of the January 1996 Regional Station Feasibility Study and the Town Meeting vote indicating a preference for a local station versus a regional station, with the local station preference voted as the Smith Valve Parkway Site, work is progressing on the preferred location.

Comment 33-6

"The Draft's statement that 'Through discussions with the Town of Westborough, it was determined that no major new developments are planned within the study area by 1996' is incorrect and this information needs to be corrected and updated. The Westborough Town Planner reports that his office has not been contacted during the past 17 months regarding planned developments."

Response

The CTPS ridership forecasting model is not a sub-area model, rather it is a regional demand model which uses regional demographic information. The demographic growth projections used in the model for the Worcester Corridor were obtained from the Central Massachusetts Regional Planning Commission, which we believe accounted for the overall growth in all cities along the study corridor.

Comment 33-7

"The 1996 'No-Build' Traffic projections need to be revised to include several major projects planned for the study area by 1996: The 120 unit Charlestown Meadows apartment complex on Gleason Street, the Wal-Mart project at Otis Street north of Route 9, and the Assabet Estates home development which involves construction of a new road off Fisher Street near Otis Street."

Response

The Walmart development, which generates a large number of trips, has been added to the traffic volumes. Other projects of lesser scale are assumed to be addressed adequately by application of conservative background traffic growth factors.

Comment 33-8

"The information concerning the proposed 'Fountainhead Plaza' project is incorrect and out of date. Permits have been obtained for construction of a Wal-Mart at that location. This project is progressing and it is reasonable to expect that it would be completed by late 1996. The Wal-Mart project needs to be included in both the 2001 and 1996 'No Build' traffic projections."

Response

See Response to Comment 29-7.

Comment 33-10

"In addition, the MBTA needs to consider the likelihood that commuters will move to these communities based upon their proximity to commuter rail, where no such service existed before."

Response

The ridership analysis was performed using the CTPS Regional Demand Models. These models utilize demographic data provided by the Regional Planning Agencies and the MPO. For this study, the population and employment projections were obtained from the Central Massachusetts Regional Planning Commission. We understand that these projections were developed by CMRPC by taking into consideration migration patterns, impact of proposed transportation improvements and regional land use changes. We

agree with the suggestion that some people would move to the towns along the rail corridor because of the new service. However, the impact of a new transportation service on residential relocation can not be fully accounted for in our demand forecasting models. There are many more factors other than a transportation improvement that jointly influence the relocation decision. Some examples of such factors are real estate prices, quality of schools, properly taxes, municipal facilities, etc.

Comment 33-11

"Traffic projections need to be revised to acknowledge the use of local roads as preferred routes over Route 9 to Otis Street. The MBTA's projections that Maynard and Fisher Streets will receive only 2.8 percent of the traffic to the Westborough station are in error."

Response

See Response to Commonly Raised Questions (re: local street traffic) in Section 8.1 of this document.

Comment 33-12

"The MBTA's traffic study fails to include numbers for the Maynard/Milk Street (Route 135) intersection. The DEIR should address this intersection and proposals for traffic control should be stated in an amended report."

Response

Route 135 in the vicinity of Maynard Street carries approximately 1,500 vehicles per hour during peak periods. If all of the Northborough station patrons used Route 135 to Maynard Street as an access route (which is not a likely scenario, as described in Section 8.1), the peak hour traffic volumes would increase by less than 3%. This increase in traffic is well below the 10% threshold before analysis is required under MEPA guidelines.

Comment 33-13

"Arch Street is a direct access route to the proposed station. The traffic study fails to assign any station related traffic to Arch Street. The DEIR does not acknowledge the high potential for traffic and pedestrian safety impacts on this narrow, winding road."

Response

Employing the revised CTPS ridership projection, approximately 3.5 percent of station traffic is assigned to a route that includes Arch Street. Based on the projected towns of origin, it has been estimated that virtually all of the Arch Street traffic destined for the station would be Westborough residents. The additional cars on Arch Street for the A.M. peak commuting period trains would total approximately 6 to 7 vehicles over a 2 hour period. There will be no noticeable impact.

Comment 33-14

"The DEIR's assertion that the Build analysis is a 'worst case' analysis is not valid if riders use local roads (Arch, Mill, Maynard, School, Fisher, etc.) to reach the station instead of Route 9. The vehicles traveling to the station on local roads will not be double counted because they are new trips: They would not otherwise be using these residential roads in the absence of a station. Furthermore, 90 percent are projected to come from outside Westborough so they are not likely to be current users of these streets."

Response

Regardless of how riders are assigned to routes to the station, the Build volumes do represent a "worst case" since no credit has been taken for trips diverted to commuter rail. Station traffic is always added to existing volumes on local streets. Also see Response to Commonly Raised Questions (re: local street traffic) in Section 8.1 of this document.

Comment 33-15

"The CTPS projections forecasting that no rail patrons will walk to the Westborough station are incorrect because they are based upon inaccurate and incomplete information (pg. 14-39).

The nearby Fountainhead apartment complex, the 120 unit Charlestown Meadows apartment complex approved for construction on Gleason Street, and ongoing residential construction in the vicinity will provide a source of rail patrons walking to the station. The

Office of the Westborough Planning Board can provide the necessary information, but the MBTA has neglected to contact them."

Response

Not as mitigation per se, but as station-related enhancement, sidewalks are proposed along the south side of Smith Valve Parkway and Fisher Street to Gleason Street. Sidewalks are proposed also along the south side of Fisher Street between Otis Street and Kimball Street. See Section 5.10 of this Final EIR.

Comment 33-16

"The Westborough MBTA Advisory Committee believes sidewalk mitigation is required for the streets where students must walk to the Fisher Street schools."

Response

See Response to Comment 28-1.

Comment 33-26

"Air quality tests should be performed for residences and near the Fisher Street schools because the Maynard Street/Fisher Street/Mill Road area will experience traffic impacts due to vehicles using these roads as shortcuts to reach the Smith Valve station."

Response

See Response to Comment 2-78.

Comment 33-28

"The station platform as proposed would be within 1 to 2 feet of the property lines of homeowners on the south side of the station tracks. The tracks are elevated up to 15 feet above 99 and 101 Fisher Street. The DEIR has not addressed how to construct the 800 foot platform, which is over 21 feet from the track center, without filling or grading on these properties. This would preclude station construction without access to these properties."

Response

Construction of the south side platform at the Westborough Station will require some temporary access and construction easements as well as slope easements. This can all be accomplished within the existing easement currently held by New England Power Company. In addition to this work, the MBTA is also proposing construction of a protective barrier within these easements to minimize any visual impacts and privacy issues from the station on the residential abuttors. The protection barrier will consist of an earthen berm, fencing, and/or landscaping.

Comment 33-29

"Limited land availability would prohibit landscaping, sound barriers or other station improvements without encroaching upon abutting property (refer to Figure 3.2-3 pg. 3-17). Abutters are skeptical of the MBTA's claims that no property taking is required for station construction and question whether the necessary sound barriers and landscaping can be developed on the limited rail property available on the south side of the tracks."

Response

Little or no land takings will be required for construction of the Station Platforms and the proposed protective barrier along the south side properties can be constructed within the existing New England Power Easement as described in response to comment 33-28.

Comment 33-30

"The New England Power Company has an easement along a 70 foot wide section of 99 Fisher Street. This easement prohibits the construction of fences and allows the New England Power Company to cut back trees and other plant growth. The easement is in direct conflict with abutters' desire for sound abatement measures. The DEIR fails to even address the existence of the power lines. These power lines must be relocated to

the north side of the tracks to allow for proper noise abatement and pleasurable landscaping on the south side of the tracks."

Response

The MBTA has had meetings and discussions with the power company to address these issues. The station design currently proposes to consolidate the existing 4 to 5 pole lines into a single pole line. This will enable construction of the protective barrier described in Response to Comment 33-28.

Comment 33-31

"Power lines adjacent to the station emit RF radiation, ANSI standard C95.1-1991 addresses the allowable RF radiation limits. The DEIR should provide RF measurements to assess the impact on passenger safety and determine if RF safety limits would be exceeded."

Response

In 1989, the U.S. Department of Labor requested the Committee on Interagency Radiation Research to investigate the radiation (EMF) issue. It was concluded that there was no persuasive evidence that electric and magnetic fields cause adverse health effects, although there is a theoretical chance that EMF radiation could result in health problems. In October 1996, the National Research Council reported that, in 17 years of research, scientists have found no hard proof that electric power lines near homes are a health hazard. Long term exposure would be the most likely scenario for adverse effects; rail patrons would be subject to very short term exposure.

Comment 33-32

"The location of the pedestrian bridge adjacent to high power transmission lines must also be addressed from both possible electrocution dangers and RF radiation hazards."

Response

As part of the power line consolidation described in Response to Comment 33-30, the line will be relocated around the pedestrian overpass structure to avoid these issues. Also, see Response to Comment 33-31.

Comment 33-33

"The DEIR fails to mention any plan to restrict pedestrians from crossing abutters' property or from walking or falling off the station platform onto abutters' property. The

SELECTION SLIP

Location Code BPL1GD

Collection Code BRLGD

Item Type BNC

Call Number Type: LC

Selector G. Fithian

Date 9.29.09

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Selection Slip - 04/29/09

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DEIR refers to a 'covered canopy about 150 feet in length' (pg. 3-17) that will prevent pedestrians from walking or falling off the platform. It is not clear whether the remaining 650 feet will have safeguards to protect passengers. With the station platform up to 15 feet above the adjacent property, severe injury could result. The issue of the abutters' liability in case of an accident must be addressed."

Response

The protective barrier described in Response to Comment 33-28, in addition to providing a visual and privacy screen for abuttors, will prevent commuter rail passengers from accessing the station from the abutting property.

Comment 33-34

"The DEIR does not address station security issues. Abutters have expressed concerns about the potential for problems given the remoteness of the site. This issue must be addressed by the MBTA in coordination with the Westborough Police Department."

Response

See Response to Commonly Raised Questions (re: Station Security) in Section 8.1 of this document.

Comment 33-35

"The MBTA's mitigation policy needs to be revised to acknowledge that 'breaking it' refers to the duration and frequency of impacts (i.e. increased traffic and noise) and not merely the change in an intersection's Level of Service. For instance, the Peak Generator Hour for station bound traffic will extend the Peak Traffic Hour in both the morning and evening. Also, residents have expressed concerns regarding the increased frequency of commuter trains in addition to the noise impacts from each train."

Response

The MBTA's mitigation policy with respect to traffic and noise is consistent with MEPA requirements for same. Level of Service "D" has been deemed an acceptable operating level for intersections, despite the frequency or duration of the condition.

Comment 33-36

"The DEIR does not address the costs of required off-site mitigation and how such mitigation will be funded with the 78 million project budget. The MBTA needs to address this issue now. Cost estimates for mitigation will better show the true costs of constructing the Smith Valve Parkway station and provide a more accurate cost comparison with the regional station option."

Response

Off-site mitigation directly related to the station such as driveways, sidewalks, etc., is included in the current cost estimate for each station. For further information on the Regional Station, see Response to Commonly Raised Questions in Section 8.1 of this document.

Comment 33-37

"Given the impacts to noise, traffic and pedestrian safety on local roads, the lack of specific mitigation proposals in the form of sidewalks, traffic control and noise abatement is unacceptable to the Town of Westborough."

Response

Specific mitigation for the Westborough Station is described in Section 5.12 of the FEIR.

Comment Letter No. 34

People for the Ashland West Alternative/John Kelly (2/17/95)

Comment 34-1

"We, the undersigned concerned citizens, local business owners and/or abutters, are writing to express our opinion that the so-called west alternative site should be selected by the MBTA as the location for the Ashland Commuter Rail Station."

Response

The Ashland Station - East Alternative has been dropped from further consideration. The revised version of the Ashland Station - West Alternative has been selected for implementation. Also see Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment Letter No. 35

Ashland Board of Selectmen (3/6/95)

Comment 35-1

"The East Alternative plan would devastate the businesses which now line Megunko Road in one of the Town's few industrial zones. This is unacceptable."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 35-2

"The design also leads us to believe that the MBTA is planning to abandon one of the Town's mandatory components for the plan: a direct access road from the station site to Route 135."

Response

The proposed station south side parking lot for 500± vehicles includes a 4,000 foot access drive which intersects Route 135 (Union Street) about 1,200 feet north of Cherry Street/Pleasant Street.

Comment Letter No. 36

Ashland MBTA Rail Committee (3/9/95)

Comment 36-1

"The DEIR and MBTA acknowledge the existence of floodplain, wetlands and sensitive areas on the proposed western alternative site. Thus this location may in fact be infeasible due to floodplain and wetlands. We believe a site redesign may potentially avoid wetlands and EPA involvement.

We suggest breaking the proposed south lot up into parcels (much like the west Natick MBTA lot). In addition, we request a reevaluation of the proposed 200 parking spaces on the north side of the tracks."

Response

The Ashland Station West Alternative site originally proposed the alteration of approximately 2 acres of wetlands. The site has since been reconfigured to significantly reduce the amount of wetland alteration to under one acre, and although not an ideal situation, is feasible and permittable.

Comment 36-2

"Sidewalks would be required, particularly for access across the Cordaville Road./Pleasant St. bridge and as appropriate elsewhere. The junction of Cordaville Road. and Pleasant St. is also a problematic and potentially unsafe access point for concentrated traffic volumes into the proposed parking lot. What mitigation does MBTA propose to alleviate this?"

Response

Sidewalks are proposed on both Pleasant Street and Cordaville Road (see Section 7.10 and 7.12 of this Final EIR). The station north side parking access is now planned to be only on Pleasant Street; virtually no station traffic will enter the intersection to or from High Street.

Comment Letter No. 37

Ashland Town Planner/Stephen Kerlin (3/9/95)

Comment 37-7

"Other overall questions include the status of the regional station at I-495 and the Mass Pike. The report glosses over this issue because of time constraints and costs."

Response

See Response to Commonly Raised Questions (re: Regional Station) in Section 8.1 of this document.

Comment 37-8

"Next, there is little comment on the connectivity with the State Parks at the proposed Ashland and Southborough stops. These two State Parks are in close proximity to this system and are important activity centers for the State. In other words, reverse commutes could be considered in more depth than as currently depicted in this report."

Response

Reverse commuters, although not projected to be a significant part of commuter rail use, are entirely welcome. Physical connections to State Parks and other recreational endeavors is desirable, but is not always within the means of the MBTA's budget for commuter rail projects. In Southborough, a walkway/sidewalk is planned to connect the station to the Hopkinton State Park.

Comment 37-25

"Consideration should be made for depressing these tracks since it is important to maintain the viability of this village center. Suggestions proposed or implied in this report for said crossings do not foster this community sense."

Response

See Section 4.3 of this Final EIR.

Comment 37-30

"Under the 'wetlands' sub-section, there is a table on total project wetland impacts (pg. 7-57), in terms of Ashland in referencing two sites in Ashland, i.e., east and west alternates, and footnotes the fact that the western site would require filling in approximately two acres of wetlands. There is a concern here as to whether the local and state authorities would allow filling in of wetlands greater than minimal thresholds."

Response

As discussed in Responses to Comments 2-85 and 36-1, the Ashland Station West Alternative has been reconfigured to significantly reduce the amount of wetland alteration. The alteration still exceeds the minimum thresholds which the local authorities could allow, however it may be permitted by State (DEP Commissioner) and Federal (Army Corps of Engineers) Authorities.

Comment 37-31

"Under the sub-section on 'archeological resources,' there is reference to an old mill site, i.e., Aldrich mill, on the Southborough-Ashland town line and states that it is in close proximity to the Sudbury River. Further elaboration on this cultural resource is necessary."

Response

The Aldrich Mill appears on the 1875 Beers Atlas for the Town of Ashland. The mill manufactured cotton and woolen textiles. The mill, located south of the railroad tracks near the Southborough town line, is beyond the range of our intensive survey. In any case, there will be no impact associated with the proposed project.

Comment 37-34

"This site becomes a 'de-facto' regional station. The Cordaville/Southville site like the Ashland site should be primarily village oriented stations that serve the neighborhood. Said stations secondarily should be intermodal in character to encourage pedestrian and bicycle traffic."

Response

As a regional transportation improvement, the Southborough Station is expected to draw patrons from several communities in addition to Southborough. Between Westborough and Ashland, given the number of persons who work or might work in Boston, a substantial volume of patrons will find the Southborough Station attractive. Parking will

be contained at 420 spaces. Numerous sidewalks are proposed on streets near the proposed station (see Section 6.10); bike racks will be provided.

Comment 37-35

"In addition, the Southborough station should be linked on an access basis with the Hopkinton State Park."

Response

A walkway/sidewalk is now proposed as a station-related enhancement which will connect the station to the State Park (see Section 6.10 of this document).

Comment 37-36

"In the sub-section on 1996 traffic impacts for Southborough, Table 15.1-10 states that a number of road segment levels for peak p.m. hours, the LOS is at E level. This is disturbing and should be improved upon."

Response

The cited table does present LOS "E" for several roadway segments, but the condition will exist with or without station-related traffic.

Comment 37-37

"The report notes the significance of the 19th century mill village in Cordaville, yet this station is not being addressed enough with this in mind."

Response

The proposed design including the combination of station, bridge, and off-site improvements will create a visually distinguished area around the commuter rail station compatible with its immediate surroundings. The MBTA has committed to providing interpretive historical information at the station to highlight the significance of the area, in conjunction with the Massachusetts and Southborough Historical Commission.

Comment 37-38

"Also, the visual impacts [Southborough Station] should be reviewed in detail such as lighting along with the aesthetics of the fencing."

Response

Visual impacts associated with the Southborough Station are discussed in Section 6.8 of the FEIR.

Comment 37-39

"Next, although Figure 16.1-3 depicts daily and weekly traffic on a number of streets in Ashland, it fails to show the amounts of vehicles on Route 135. This volume currently is in the vicinity of at least 17,000 v.p.d. This is a major factor that should have been placed on this drawing."

Response

The concern under the Build condition is the turning movements in and out of the station access drive at Route 135. Regardless of the daily traffic volume on Route 135, peak A.M. and P.M. turns indicate that some mitigation is in order. Under Section 7.1, the traffic impacts presented are mitigated with a proposed traffic signal in Section 7.12.

Comment 37-40

"In Tables 16.1-15 and 16.1-16 on road segments, the report depicts a LOS of E for Cordaville Road. This should be examined for improvements in more detail."

Response

The cited tables presented data for the Ashland Station Only scenario -- no other stations except Worcester. This case was presented to address the upper limit of impact. It is not a realistic case and will not occur since Grafton Station will be constructed prior to an Ashland Station which will be built in the same general time frame as the Westborough and Southborough Stations. In any case, the Build versus the No-Build LOS's are virtually the same.

Comment 37-41

"In addition, a proposed roadway to the site should be factored in the traffic analysis and design as well."

Response

Level of service analyses were performed for station access driveways on Pleasant Street and at Union Street, and results shown in Tables 16.1-7 and 16.1-8 for 1996 (for example) in the DEIR. These analyses have been updated as needed, for the current Ashland Station geometrics (See Section 7.1 of this Final EIR).

Comment 37-42

"These disposal sites (i.e., Brownfields) should be evaluated in an overall plan in conjunction with the rail station and surrounding land uses. The sites should be cleaned in a proper manner for reuse."

Response

The Ashland Station - East Alternative has been dropped from consideration. The currently proposed Ashland Station is upgradient of these sites.

Comment 37-43

"In subsection 16.22 on pedestrian safety, the report states that the potential twenty walkers 'could use the existing sidewalk along the north side of Pleasant Street to reach the commuter rail station.' This is unacceptable, infrastructure improvements are necessary on this street to make the area more pedestrian oriented, specifically installation of two sidewalks in 'class a' condition."

Response

A new sidewalk is planned on the south side of Pleasant Street from the intersection at High Street, easterly past the station driveway over a total distance of about 2,400 feet.

Comment Letter No. 38

Ashland Office of Selectmen and Town Manager (11/22/94)

Comment 38-1

"The impact on Route 135 at the intersection of the driveway entrance to the south parking facility will be significant:

a. the intersection must be signalized as a matter of public safety; and,
b. the intersection must be widened to provide turning lanes."

Response

Both of the above recommendations are now planned. See Section 7.12 of this Final EIR.

Comment 38-2

"Other intersections in Ashland which are already at D or F level of service (LOS) will degrade to failure or worse with the impact of traffic from the proposed station. The applicant must be prepared to mitigate this impact. The Board is concerned that anything less will result in gridlock at certain times of the day."

Response

The MBTA has met with town officials to discuss and agree upon mitigation measures. These measures are described in Section 7.12 of this FEIR.

Comment 38-3

"While not an environmental issue, per se, the Board is concerned with the negative tax revenue impact of the project. Loss of property tax revenue will result with "T" ownership of the land. Mitigating measures include adjustment of the "T" assessment and revenues from parking lot fees to offset the tax revenue loss."

Response

The MBTA is willing to discuss financial issues posed for communities by the projects removal of property from local tax rolls, but not in the MEPA process. We point out that a recent federal government study strongly suggests, however, that having a commuter rail station in a given community raises its overall property values by several percent,

offsetting any possible revenue loss. The study is titled "Impacts of Commuter Rail Service as Reflected in Single-Family Residential Property Values" as published by the Transportation Research Board in the Transportation Research Record No. 1466.

Comment 38-4

"While the Board's preference of site location is the East alternative, it feels strongly that the environmental impacts of the West alternative be thoroughly evaluated under the scope of the Final EIR."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment Letter No. 40

Hopkinton Office of the Selectmen (3/8/95)

Comment 40-2

"The Board of Selectmen is concerned with the proposed overpass, as being unacceptable, as it is aesthetically incompatible with the character of the neighborhood [Southborough Station]. There is a pedestrian underpass running under the tracks, which could readily be reactivated. Security issues could easily be addressed with adequate lighting, a wide tunnel, and 360 mirrors."

Response

The pedestrian overpass is no longer proposed. See Sections 2.1 and 6.8 of this Final EIR.

Comment 40-3

"The Town of Hopkinton is concerned with a proposal for a jogging trail around Cordaville Mill Pond. Half of the pond is within the Hopkinton Town bounds, and residents in Hopkinton may be adversely affected by a loss of privacy and potential loss of aesthetics in this area of the pond."

Response

A jogging trail around Cordaville Mill Pond is not proposed as part of this project.

Comment 40-4

"The MBTA has recently agreed to build some sidewalks near the proposed station. One of the goals of the Town of Hopkinton's Master Plan is to provide sidewalks from the proposed station to Hopkinton State Park. The Board of Selectmen hopes this concept will be considered in the final layout of sidewalks around or near the station."

Response

A walkway/sidewalk is now proposed to connect the Southborough Station to the Hopkinton State Park (see Section 6.10 of this Final EIR).

Comment 40-5

"Parking lots around the station will need lighting for security reasons. Since there are homes in the area, provision should be made to shield the lighting, to keep from having excessive lighting shining on the homes of the neighboring residents. Preferably, tall conifers should be used as a buffer between the parking lot and nearby homes."

Response

Parking lot lighting at commuter rail stations will include "cut-off" type fixtures which will direct lighting away from abutting properties.

Comment 40-6

"There has been some discussion of a multi-level parking garage being built next to the station, in Southborough. The Board is concerned with the negative impact of such a structure in this rural area. We would like assurance that the such a structure will not be built."

Response

The MBTA has no plans to build structured parking at the Southborough Station. Although no assurance can be offered that a garage would never be built at this site, the Southborough and Hopkinton town officials would play a significant role in such a decision.

Comment 40-7

"We understand that the Town of Southborough has requested that a portion of the parking lot be reserved for Southborough residents. Although we may not normally support excessive parking, if the State grants this request, we believe that the Town of Hopkinton should receive the same type of benefit, due to the increased traffic and pollution which will affect our community with the building of this station."

Response

There is no evidence that Hopkinton will see significant increases in traffic and pollution as a result of building and operating the Southborough Commuter Rail Station. Nor can the MBTA participate in restricting access to or use of state-funded facilities on the basis of residence.

Comment Letter No. 48

Larry Gomes (2/24/95)

Comment 48-1

"The reality of the situation is that the Southborough station with its excellent access to Route. 85 and Route. 9 will become the defacto regional station the minute it comes online. I believe that both lots at Southborough will be completely full from day one, and the overflow traffic will work its way a few miles to Ashland and fill any available space there."

Response

The above stated scenario could be true generally. The constrained parking (420 spaces) at Southborough is factored into the ridership/parking demand at an Ashland Station. In 1996, the parking demand at Southborough will equal the 420 space supply; at Ashland, the demand of 610 will be satisfied by the supply of 700 spaces.

Comment 48-2

"The only way to reduce the impact on Southborough and Ashland is to provide another station location that would be attractive for the Marlborough and Hudson commuters using one of the old spur lines that run up through those towns. Another alternative might be a park and ride facility using buses to bring in passengers from Marlborough and Hudson on a schedule coordinated with the train."

Response

The 1990 Feasibility Study addressed various alternatives for commuter rail service in the Metro West area, including commuter lines and combinations of lines. The currently proposed Worcester Commuter Rail Extension was a selected option. Another station or the institution of bus routes would require a new feasibility study and does not appear to be called for.

Comment 48-3

"The main benefit of this station is to the surrounding towns of Shrewsbury, Grafton, and Northborough. Since the Westborough station would be providing a service mainly for other towns, it is only fair that some sort of mitigation should be offered. At a bare minimum, side street improvements and sidewalks for Fisher Street should be provided."

Response

The revised CTPS ridership totals 221 daily patrons for the Westborough Station. A total of 42 Westborough residents now are projected to use the station daily. Although not considered mitigation per se, sidewalks are now planned as station-related enhancement on several streets in Westborough (see Section 5.10 of this Final EIR).

Comment Letter No. 49

Louis & Maureen Jankauskas (2/21/95)

Comment 49-1

"In summary, we believe that a small downtown station, geared to Westborough residents, is in the town's best interest and should be evaluated and proposed to the MBTA. Based on the DEIR, page ES-8, 'the MBTA will construct only intermediate stations which receive the host community's approval.' Westborough should reject the Smith Valve Station site, should recommend the downtown site, and let the MBTA decide if the downtown site is financially viable."

Response

The downtown site was evaluated and found to be lacking due to parking constraints, traffic concerns, and high cost. Also see Section 2.4 and Response to Commonly Raised Questions (re: Regional Station) in Section 8.1 of this document.

Comment 49-2

"First, the station platform, as proposed, would be within 1 to 2 feet of the property line with our property and other Fisher Street residences on the south side of the station. I don't see how the station can be constructed without access to abutting properties and without filling and grading of these properties. The tracks are at points elevated approximately 15 feet above our property and the property at 101 Fisher Street. How

to construct the 800 foot platform, which is over 21 feet from the track center without filling on these properties, has not been addressed. Also, with the town's 15 feet set back zoning requirement, the construction of the station does not conform to the town zoning by-laws. As an abutter, I am against any relaxation of this set back requirement. Referring to DEIR Figure 3.2-3, page 3-17, this limited land availability would prohibit landscaping, sound barriers, or other station improvements without encroaching on abutting property. Although the MBTA has stated that no property taking is required, I am not convinced that the station can be constructed and the appropriate sound barriers and landscaping developed on the limited rail property available on the south side of the tracks."

Response

As discussed in Response to Comment 33-28, construction of the station platform will require temporary access and construction easements as well as permanent slope easements. This can all be done within the existing New England Power Easement. The station design includes construction of a protective barrier (consisting of an earthen berm, fencing and landscaping) which will separate the station from the residential abuttors. The 15 foot setback requirement does not apply to the MBTA.

Comment 49-3

"Second, the New England Power company has an easement right along a 70 feet wide section of our property. This easement prohibits the construction of fences and allows the New England Power Company to cut back trees and other plant growth. This easement is in direct conflict with the desire of the abutting property owners for sound abatement measures. The DEIR never mentions the existence of the power lines in addressing the station construction. The only way to construct a station on Smith Valve with proper noise abatement for the south side homeowners and pleasurable landscaping is to relocate these power lines to the North side of the tracks. Relocation of the power lines must be a part of any Smith Valve Station baseline."

Response

As discussed in Response to Comment 33-30, the station design includes consolidating the existing power lines to allow for construction of the aforementioned protective barrier.

Comment 49-6

"The DEIR did not provide any RF measurements to assess the impact on passenger safety and to assess whether RF safety limits would be exceeded. The location of the pedestrian bridge adjacent to high power transmission lines must also be addressed from both possible electrocution dangers and RF radiation hazards."

Response

See Response to Comment 33-31 and 33-32.

Comment 49-7

"Another safety issue at the Smith Valve station location is the proposed 800 foot platform with a (page 14-34) 'covered canopy about 150 feet in length' as shown on page 3-17. This canopy will prevent pedestrians from walking or falling off the platform. No such protection is mentioned for the remaining 650 feet of platform."

Response

As discussed in Response to Comment 33-33, the proposed protective barrier will prevent commuter rail passengers from accessing the station through the abutting properties.

Comment 49-8

"The DEIR makes no mention of station security. With the present problems at the Fisher Street bridge due to the remoteness of the site and the infrequent police patrol, this area is susceptible to security problems. The proposed pedestrian bridge could easily become a gathering place and could increase security problems in the vicinity of the station. This issue must be addressed by the MBTA prior to the station construction and in coordination with the Westborough Police."

Response

See Response to Commonly Raised Questions (re: Commuter Station Security) in Section 8.1 of this document.

Comment Letter No. 50

Mary Fisher (2/24/95)

Comment 50-1

"Why does the station [Westborough] have to be located so close to one of the worst intersections of ROUTE 9? I go through the Otis Street and Route 9 intersection each morning. I question if the intersection could handle the additional traffic of people from Shrewsbury and Northborough."

Response

See Response to Commonly Raised Questions (re: Local Streets) in Section 8.1 of this document.

Comment Letter No. 51

Mary Cullen (2/20/95)

Comment 51-1

"Although I see a growing need for train service, I see a larger need not to have it [Westborough Station] located on Smith Valve."

Response

See Section 2.4 (Regional Station Feasibility Study) and Section 5.0 (Environmental Impacts - Westborough Station) in this Final EIR.

Comment Letter No. 52

Stephen & Charlene Henry (2/24/95)

Comment 52-2

"We would also like to know who is going to provide security in the neighborhood, and what is going to be done with the increasing amount of traffic?"

Response

See Response to Commonly Raised Questions (re: Local Streets and Station Security) in Section 8.1 of this document.

Comment 52-3

"The traffic problem at the intersections of Otis Street and Fisher Street is already a problem that has received little or no attention of the local police department. Now you are suggesting that we tax the extremely dangerous intersection with even more traffic."

Response

With the Fisher Street Bridge closed, the west leg of this intersection is a dead-end street serving a few houses, and as a result, there are few conflicting traffic movements. The station will add a relatively few vehicles during the 2 hour A.M. and P.M. peak commuter periods, and essentially no additional traffic outside of commuter periods.

Comment 52-4

"What are the guarantees that our homes will remain safe, or are you proposing that we put that extra burden on our local law enforcement agency? May be the MBTA is proposing that we spend our tax dollars and hire more MBTA cops to sit in our backyards and protect our rights!"

Response

See Response to Commonly Raised Questions (re: Station Security) in Section 8.1 of this document.

Comment 52-5

"What about the power line that are just about in our backyards now? It is my understanding that in order to properly put it the needed lines and tracks, that these lines will have to be moved."

Response

As discussed in Response to Comment 33-30, the MBTA in proposing to consolidate all power lines into one set of poles. The work to consolidate these poles will include any relocation required to construct the station's pedestrian overpass.

Comment Letter No. 53

Brian and Antoinette Kennedy (3/7/95)

Comment 53-1

"We are writing you because we have a concern regarding the MBTA train station on Smith Valve property in Westborough, Massachusetts. We are not against rail service. We are concerned that the neighborhood roads are too narrow for the traffic that it will bring."

Response

See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document.

Comment 53-2

"The DEIR does not allow for widening of the roads or providing sidewalks. This concerns us as there is already a problem with the buses running our children to and from school. This will effect both towns of Westborough and Shrewsbury. Many people already use the narrow back roads for short cuts and it will only increase with the station."

Response

See Response to Commonly Raised Questions (re: local street traffic) in Section 8.1 of this document. Also see Section 5.10 regarding proposed sidewalks on local streets.

Comment Letter No. 55

E. Thomas and Judith McCabe (3/6/95)

Comment 55-6

"There are tremendous traffic and safety impacts for the towns of Westborough and Southborough at the proposed station sites. MBTA misses entirely the local viewpoint. We want a regional station INSTEAD of local stations."

Response

The MBTA has not missed the local view point. In fact, it believes that it has selected the location most favored by Westborough residents. In March 1996, residents of the town of Westborough were given an opportunity to vote on whether or not to have a station, and if so, where it should be. Over 60% of the voters supported a local station, as opposed to a regional station, or no station at all. Voters also supported the Smith Valve site as the preference of a local station by almost 2 to 1 over any other option. The MBTA believes that this vote confirms that its original location is the best available location for the station.

Comment 55-7

"The 'major route' access referred to by the MBTA to the Westborough site is Route 9 and Otis Street. This intersection is LOS F. Commuters coming from Northborough and Shrewsbury will avoid this intersection and use Route 135 to Maynard and Fisher Streets."

Response

See Response to Commonly Raised Questions (re: local street traffic) in Section 8.1 of this document.

Comment 55-8

"The two Schools on Fisher Street have a total enrollment of 693 fifth through eight graders. Students walk from all neighborhoods in a 1½ mile radius on streets with no sidewalks."

Response

See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 and Section 5.10 (Pedestrian Safety) in this document.

Comment 55-9

"Contrary to what the MBTA projects, local travel pattern to the Smith Valve site are most likely to occur over residential neighborhood street. Ref: Westborough Town Planner comments on DEIR. These streets are narrow winding roads bordered by stone walls and massive trees. Arch and Maynard Streets narrow to 1½ lanes under railroad bridges that the MBTA has looked at and will not consider widening."

Response

See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document.

Comment 55-10

"The Draft fails to acknowledge Westborough's planned projects on Route 9 and growth in housing and commercial development nor has the Town Planner been contacted. Access to the proposed Smith Valve Parkway site will have a serious impact on the neighborhood streets of Arch, Gleason, Maynard, School, Church, Fisher, and Mill Road."

Response

The CTPS ridership forecasting model is not a subarea model, rather it is a regional demand model which uses regional demographic information. The demographic growth projections used in the model for the Worcester Corridor were obtained from the Central Massachusetts Regional Planning Commission, which we believe accounted for the overall growth in all towns along the study corridor.

Comment Letter No. 57

Janice and Alan Silvestry (3/5/95)

Comment 57-1

"As residents of Maynard Street, Westborough, we are disturbed by the impact the proposed Smith Valve Station would have on the surrounding neighborhood. The DRAFT Environmental Impact Report for the Worcester Commuter Rail Extension Project fails to address the effect increased traffic would have in a heavily populated area where two schools are located. We are very concerned for the safety of children and adults alike as they walk along these streets.

We are very much in favor or a regional station at Routes 495 and 9. Westborough would benefit from such a project without compromising the safety of its residents."

Response

See Response to Commonly Raised Questions (re: Regional Station and Local Street Traffic) in Section 8.1 of this document. Also see Section 2.4 (Regional Station Study) and Section 5.10 (Pedestrian Safety).

Comment Letter No. 58

Rosemary Johnson (3/6/95)

Comment 58-1

"I am in favor of the commuter line stop here in Westborough, either at the Otis Street area, or downtown at the old railroad stop. There are complex issues involved which must be resolved. Some of these are town traffic patterns and financial assessment."

Response

The downtown site was evaluated and found to be lacking due to parking constrains, traffic concerns, and high cost. The Smith Valve Parkway site was favored by vote at the March 1996 Town Elections (See Section 2.4 of this Final EIR). Also see Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document.

Comment Letter No. 60

Dennis Cox (3/8/95)

Comment 60-1

"The DEIR fails to adequately address the basic issues of site construction, noise and vibration abatement, safety, liability, and security for Smith Valve Station and the Town of Westborough."

Response

Construction noise and vibration effects are discussed in this FEIR, Section 5.3. Issues pertaining to safety, liability, and security are discussed under commonly raised questions in Section 8.1.

Comment Letter No. 61

Jacqueline and David Cox (3/8/95)

Comment 61-1

"Rail Extension Project. The DEIR fails to adequately address the basic issues of site construction, noise and vibration abatement, safety, liability, and security for Smith Valve Station and the Town of Westborough."

Response

See Response to Comment 60-1.

Comment Letter No. 62

Robert Brais, Barbara Brais, Marie Brais (3/5/95)

Comment 62-2

"It is our considered opinion that several of the access roads to that site (Smith Valve in Westborough) cannot carry the traffic that would be generated by a facility of the size intended. Several of the streets are narrow and have no sidewalks, and we feel that public safety would be endangered."

Response

See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document.

Comment Letter No. 64

Marvin Silver (3/7/95)

Comment 64-2

"Motorists traveling from Northborough and Shrewsbury would clog Westborough roads as they attempt to reach the station. Increased traffic would obviously present added danger, especially to children who must walk to either the Middle School on Fisher Street or the Armstrong School on West Street. Many neighborhoods in Westborough lack sidewalks and traffic increases would likely pose significant dangers to the walking public."

Response

See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document. Also see Section 5.10 regarding pedestrian safety.

Comment 64-3

"I would urge the MBTA to further study the situation and present a plan for one regional station (perhaps closer to Route 495) which would draw more riders to one location which could accommodate it, and keep traffic off local roads."

Response

See Response to Commonly Raised Questions (re: Regional Station and Local Street Traffic) in Section 8.1 of this document.

Comment Letter No. 66

William and Mary Anne Coveney (3/6/95)

Comment 66-1

"We are writing in regard to the Draft Environmental Impact Report EOEA #9154 (DEIR) for the Worcester Commuter Rail Extension Project. We insist that you reconsider the proposed site at the Smith Valve Parkway."

Response

The MBTA maintains that the Smith Valve Parkway Station Site properly serves commuter patrons without significant adverse impacts. Westborough residents generally agree with the proposed station site (see Section 2.4 of this Final EIR).

Comment 66-2

"This station (local Westborough Station) will bring increased traffic to Fisher Street. This already populated area is host to another development of new homes (the Assabet Estates). Fisher Street is host to numerous bus stops as well as children walking to the Armstrong School as well as the Sarah Gibbons Middle School. The sidewalks as they exist are dangerous and poorly maintained. An appropriation for $30,000 worth of improvements to the sidewalks on Fisher Street is among the articles coming up at the next town meeting, as of this writing the town's Finance Committee has still made no recommendation on this appropriation. If these sidewalks, that are already hazardous for our children are not improved, and traffic flow increased, the next fatality on Fisher Street, could be one of our children (an adult was killed on Fisher Street in 1994)."

Response

See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document. Also see Section 5.10 regarding pedestrian safety.

Comment 66-3

"We respectfully request that the downtown site at Fruit Street be re-evaluated. With an existing train station already present, it would seem an ideal location. This station would not have as great an impact on residences. Another site we respectfully ask you to consider would be the proposed site at the junction of Routes 495 & 9."

Response

The downtown site was evaluated and found to be lacking due to parking constrains, traffic concerns and high cost. Also see Section 2.4 (Regional Station Feasibility Study).

Comment Letter No. 69

Elizabeth Colbert (2/22/95)

Comment 69-1

"What is the benefit to Westborough, since it's projected only 22 residents will use the train?"

Response

The Worcester Commuter Rail Extension project is a regional transportation improvement. Communities which host a local commuter station do so with certain benefits and with certain drawbacks. Without willing communities to host stations, the general public and regional benefit would not be realized. Automobile travel would not be reduced and air quality benefits would not be achieved. Although local traffic impacts are not projected to be significant overall, the MBTA will provide a variety of sidewalk improvements (much needed with or without the project) which will improve pedestrian safety. Please note that the January 1996 revised CTPS ridership projections now show 42 Westborough residents will use the Westborough Station on a daily basis. An additional 41 riders will use the Southborough Station.

Comment 69-8

"Page 14-10 states those who would drive to the station are "already on the road", however, those going to Boston would have no reason to travel to Maynard St., they would get directly onto Route. 9 East."

Response

Although it is stated that "many of those who would drive to the station are already on the road," all commuter patrons driving to the station were considered to be new trips. Therefore, the analysis for the Build condition does some double counting and tends to be extremely conservative.

Comment 69-10

"I would like further explanation for the cost and benefit of this project: further studies on air quality for abutters, especially the affect of diesel fumes on small children (Westborough's Middle School is on Fisher St.. which abuts the tracks); noise barriers for Maynard, Arch, Fisher. and Water Streets; sidewalks and restrictive signage for these same roads plus Mill Road.

Response

Project cost benefit was discussed in Section 2.2 of the March 1996 FEIR #2. Locomotive exhaust consists primarily of particulates. The exhaust also contains oxides of sulphur, oxides of nitrogen, and minor amounts of unburned fuel. The unburned fuel is responsible for the odor associated with diesel engines. Particulates have a short term effect on local air quality adjacent to the tracks, in that these particulates are generally believed to settle out of the air in a short time.

The technical analysis for noise did not identify any noise impacts in Westborough and no mitigation is required.

Sidewalks are discussed in Section 5.10 of this FEIR #3.

Comment Letter No. 71

Mrs. Paul Smith (3/21/95)

Comment 71-1

"My backyard goes down to the railroad track and I am greatly against the pollution and noise of trains stopping and starting in the back of my property" (re: local Westborough Station).

Response

The station design includes construction of a protective barrier (consisting of an earthern berm, fencing and landscaping) which will separate the station from residential abuttors. Noise levels will be lower at this site with a station than without, as trains will be operating at lower speed.

Also see Response to Comment 69-10 for discussion of locomotive exhaust and Response to Commonly Raised Questions (re: Regional Station) in Section 8.1 of this document.

Comment Letter No. 72

Helen and Bill Panas (2/17/95)

Comment 72-1

"We are resident of Maynard St. which is located near the proposed Smith Valve station site in Westborough. Let us say first that we are not opposed to the idea of MBTA service from Westborough to Boston. Our main concern is with the Smith Valve site and is focused on the safety of our children and the children of other families in this neighborhood as they walk to schools on Fisher St. at the very time that commuters are rushing for their trains. We do support the idea of a regional station accessible through major thoroughfares in the Route 495/90 area."

Response

See Response to Commonly Raised Questions (re: Regional Station and Local Street Traffic) in Section 8.1 of this document. Also see Section 2.4 (Regional Station Feasibility Study) and Section 5.10 (Pedestrian Safety).

Comment 72-2

"The MBTA's estimate of the number of cars using Maynard is unrealistically low. They choose to downplay the importance of this street in providing a back access to Smith Valve for traffic coming from Northborough. Instead they feel that the State's proposed improvements to the Otis Street/Route 9 intersection will make that an attractive route to the station."

Response

See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document.

Comment 72-3

"The MBTA's estimate of the number of cars using Fisher St. is unrealistically low. Anyone who knows the area would prefer to take Milk St. and Fisher St. from the rotary to Smith Valve rather than Mill Road."

Response

See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document.

Comment 72-4

"Maynard St. and Mill Road are narrow winding roads and have no sidewalks, Fisher St. has poor and spotty sidewalks. Our children and the other neighborhood children use these streets to walk to and from school. Our "Level of Service" may be excellent but our children are at an increased risk from the new traffic generated by the MBTA station."

Response

See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document and Section 5.10 regarding pedestrian safety.

Comment 72-5

"The MBTA, in what only can be considered an attempt at injecting some humor into an otherwise very dry document, offers to put signs on Fisher St. "to discourage station bound traffic from using the section of Fisher St. adjacent to the School" (pg. 14-41). Do they seriously think that signs would keep the daily drivers from finding the most expeditious route to the station?"

Response

Station-bound traffic that might use Fisher Street via Route 135 is anticipated to be primarily Westborough residents. Although definitive numbers are not practicable to predict, it is estimated that less than 3% of the total station traffic would use Fisher Street. In terms of riders per train in 1996 for the A.M. peak hour trains, the resulting additional cars on Fisher Street would be one (1) for the earliest and latest trains and two (2) each for the middle two trains. Half of the total six (6) cars should be outside of the school foot traffic time frame.

Comment 72-6

"Almost as an afterthought the MBTA addresses pedestrian safety on pg. 14-39 and then only for their ridership who walk to the station (which their projections forecast to be none), by offering to work with the town to provide sidewalks "on Otis St. and possibly other sidewalks on nearby streets which would carry station oriented traffic." This again misses the point about safety of the non-station oriented school children who must cross the streets and walk along the shoulders."

Response

Recent meetings with Westborough officials resulted in a sidewalk program which includes new sidewalk construction on several local streets. See Section 5.10 of this Final EIR regarding pedestrian safety. Also see Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document.

Comment 72-7

"We request that you insist that the MBTA consider a more realistic impact of ridership traffic on the Fisher St./Maynard St./Mill Road neighborhood and follow your instructions to discourage the use of these streets by providing some meaningful solutions to the safety problems they will be causing."

Response

The traffic analyses do not project any significant impacts on local streets such as Fisher, Maynard, or Mill Road in 1996 or in 2001. See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document. Also see Section 5.10 regarding pedestrian safety.

Comment Letter No. 74

Jennifer Speed (3/7/95)

Comment 74-1

"I do not believe the study which says that traffic will not be greatly impacted in the area of Fisher, Mill, and Maynard Streets. These are residential streets with two elementary schools in the areas. Any traffic increase will have a negative impact in such a neighborhood."

Response

See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document. Also see Section 5.10 regarding pedestrian safety.

Comment Letter No. 77

Susan Stager (2/26/95)

Comment 77-2

"I oppose the establishment of a local rail station on Smith Parkway. The simple fact that there is sufficient land there that can be acquired fairly easily and fairly economically does not make that an appropriate site for a station. The fact is outweighed by the profound negative effects a station would have on our street and other streets radiating in all directions from that location through neighborhoods similar to ours in Westborough and Shrewsbury."

Response

See Response to Commonly Raised Questions (re: Regional Station and Local Street Traffic) in Section 8.1 of this document. Also see Section 2.4 (Regional Station Feasibility Study).

Comment 77-3

"Every increase in traffic makes the street (Arch Street) less safe for all of us. In my opinion the safety, the sanctity of local neighborhoods should be the foremost consideration."

Response

See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document.

Comment Letter No. 80

Richard Fournier, Jr. (3/5/95)

Comment 80-3

"I would hope the MBTA will do everything possible to mitigate the impact of the station on the surrounding area."

Response

Station-related traffic will result in some adverse impacts to Southborough Streets. Proposed mitigation, including extensive sidewalk additions and a new signalized intersection at Route 85 and Southville Road, are presented in Section 6.12 of this Final EIR.

Comment Letter No. 85

Russell Fustino (10/4/95)

Comment 85-1

"I would like to commend the Selectmen who publicly stated their safety concerns and the benefits regarding potential closure of the Route 9/Woodland Road crossover at the 9/27/94 Selectmen meeting. I am disappointed however, at yet another delay in the decision making process for the closing of that intersection; this time for MBTA impact analysis. Road safety minded residents have had to endure 6 delays over the past 2 ½ years. The evidence continues to mount, as time passes by, justify closing the median."

Response

See Response to Comment 1-45.

Comment Letter No. 88

Judith and Thomas Little (2/2/95)

Comment 88-1

Re: Southborough Station: "We are thoroughly against the building of a station in our town, most especially in the proposed location, and think that the increased pollution, noise, traffic, and parking problems will bring quite a threat to our life as it stands now."

Response

All of the issues cited in the comment have been addressed in the November 1994 DEIR, the March 1996 FEIR and the current FEIR. The impacts caused by station-related traffic are addressed, along with proposed mitigation (see Section 6.12).

Comment Letter No. 89

Burnam's Supper House/Daniel Giargiari (3/3/95)

Comment 89-1

"Throughout this process, I have let it be known that the opportunity for a public/private partnership between the MBTA and our restaurant would be a very positive step for both entities. Having been privy to the concerns of all parties involved in this local project, I am confident that the Ashland West Alternative would become a mecca for reverse ridership. However, I do have a number of concerns about the potential insensitivities of state agencies. Matters of design, shared parking, easements, land transfer, monetary compensation and protection from future land taking must be addressed."

Response

Since the filing of the DEIR, the MBTA has increased and welcomed constructive public participation in the design process. Communications with land owners and abuttors is expected to continue through the design and construction phases of the project.

Comment 89-2

"With several reservations, I am offering a 'best way' approach for the north side of this alternative.

The property to the east of our establishment is currently for sale. This parcel should be utilized for that reason. If more property is needed for the project, and ours is considered, then naturally it should be taken from an east to west direction.".

Response

Through discussions with property owners and local officials, the MBTA is proceeding with design of the Ashland West Alternative which includes acquisition of the property identified in this comment as well as retaining the existing restaurant.

Comment 89-3

"The issue of intersection failure at High St., Pleasant St., and Cordaville Road would be less problematic if the entrances and egresses are kept as far away from the intersection as possible. This would eliminate crossover traffic at the intersection."

Response

The currently proposed reconfigured Ashland West Alternative (now the proposed Ashland Station) proposes the station access drive for the north side parking only on Pleasant Street. The elimination of the driveway on High Street removes virtually all station traffic from the High Street leg of the intersection.

Comment 89-4

"The section of property that we intend to retain must be permitted to occupy and operate according to the plans which have been offered to the town. This area does not include any parking and, therefore, it would be necessary to dovetail our parking needs with the MBTA's."

Response

With the proposed acquisition of the adjacent property (to the east), sufficient land is now available to meet parking demands of both the commuter rail station and the restaurant.

Comment Letter No. 90

Nelson Holden (3/6/95)

Comment 90-1

"I am vehemently opposed to so called (Ashland) "East Site" for the following reasons. 14 Businesses and Residents that will be put out of business from Site East usage."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 90-2

"My business as well as 2 others cannot be displaced to another part of town. Zoning will prohibit this."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 90-3

"Also I am upset and feel disenfranchised because I and we were never informed of anything going on."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 90-4

"I have never yet been able to get or see a plan of East and West sites though I tried the board said "We did not realize how many businesses would be affected by the proposed "East Site."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 90-5

"West Site" has substantially less impact on Residents, buildings, Old age Homes, and the like. Land Owners of "West Site are amenable to the land taking. It would cost less and be a benefit to the town, not a determent as in "East Site" location."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment Letter No. 91

Claudia Lefter for Nelson and Martha Holden (2/8/95)

Comment 91-1

"My family owns land which is currently being considered by the MBTA for rail station (located at the Eastern Location). As of the writing of this letter, our family has not been notified by anyone associated with this project that our land was under consideration. In fact, we found out from a friend on Monday, February 6, 1995. Just 3 days ago!"

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment Letter No. 92

Citizens Lefter, Leacu, Camille, Holden (3/7/95)

Comment 92-1

"The Megunko Road parking lot will severely impact and/or eliminate fourteen existing businesses. Most of these fourteen businesses service the local Ashland area. Therefore, the proposed East Location would essentially put most of these companies out of business. This action would then reflect negatively on the downtown area merchants from whom these businesses purchase supplies, food, and other services."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 92-2

"There are dozens of residential homes on the north side of the railroad tracks from Megunko Road. The maps provided in the draft EIR do not show the homes on the east end of Pleasant Street, nor the small streets of Forest Avenue, Metcalf Avenue, or Tilton Avenue. I spoke to many residents of this area and they, also were not notified that this proposed railroad station was being considered so close to their homes."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 92-3

"On February 27, 1995, we attended a local Rail Committee Meeting at the Town Hall in Ashland. We were told that the committee only received updated plans for the "East Location", when the draft EIR states several times that both "East and "West will be thoroughly investigated."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 92-4

"The landowners directly affected by the "East Location" parking lots, and the abutting residential homes were never formally notified that this land/area was being proposed for a rail site."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 92-5

"The "East" location is approximately 1/10 mile from the intersection of Cherry Street and Park Road, and approximately 2/10 mile from the Main Street RR crossing. Within these two locations there are two elderly housing complexes. The Ashland Board of Selectmen are vigorously pursing Conrail to find ways to reduce the existing train noise that currently have a negative impact on the elderly residential homes. (These homes stand adjacent to the railroad tracks). To add a MBTA rail station so close in proximity to these housing units will only Intensify the current embittered situation."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 92-6

"The East location station will be very close to the Cherry Street and Main Street railroad crossings. The closeness may further obstruct heavy rush hour traffic by the mere fact the MBTA trains (heading west) will begin to slow as they approach the "East" location."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 92-8

"The "East" location negatively impacts more individual people than the "West" Location. The West location will take no businesses and will not directly affect any residential homes."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 92-10

"Chapter 3, page 32, East Location. "The site lies in an industrial areas, portions of which are currently occupied by small businesses. Comment: Not vacant, all land is occupied by small businesses."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 92-11

"Chapter 11, page 15, (para. 2), East Location. "three industrial parcels. Comment: We are existing "business properties", too!"

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 92-12

"Chapter 16, page 1, West Location. "pending environmental (Nyanza) issues, Ashland station East is also be evaluated. Comment: Why were updated maps only sent of East Location to local MBTA Rail Committee (presented at their meeting on February 15, 1995), when two out of three sections above spoke of further evaluation of West Location?"

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 92-13

"Chapter 16, page 1, East Location, Megunko Road parking lot abuts Nyanza Superfund. Comment: East Location within Nyanza Superfund site."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 92-14

"Chapter 16, page 4, East Location. "total of 18 residential buildings were found to be within noise impact distance. Comment: First, they are homes not buildings. I know of no other railroad station that abuts residential neighborhoods. None of these people have been properly notified. What kind of noise?"

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment 92-15

"Chapter 16, page 47, East Location. "Phase II is currently underway and includes the extraction and treatment of groundwater. Comment: This has not been constructed yet. Refers to the groundwater remediation of Nyanza's plume. Phase III, excavation of "eastern wetland" has not begun yet (Nyanza Superfund site)."

Response

See Response to Commonly Raised Questions (re: Ashland Station Siting) in Section 8.1 of this document.

Comment Letter No. 93

Ellen Giargiari (2/28/95)

Comment 93-1

"I am saying I am pleading with you not to allow the MBTA Stations on the proposed site" Ashland Station."

Response

Assuming that the comment refers to the former Ashland Station - East Alternative primarily, the currently proposed Ashland Station (a reconfigured Ashland Station - West Alternative) will move the north side parking lot away from the residences along the north side of Pleasant Street. Pleasant Street is a Federal-Aid Urban roadway which serves important travel needs of the community. Although not all portions of Pleasant Street and not all intersections with Pleasant Street now operate as well as could be desired, station-related traffic for the build condition will not cause significant impacts versus the No-Build condition.

Comment Letter No. 95

Andrew and Teresa Boyce (2/2/95)

Comment 95-2

"The proposed pedestrian overpass [Southborough Station] is unacceptable as it is aesthetically incompatible with the character of the neighborhood. The light spillover from this ugly 30 foot high concrete and steel structure is maximum. There is already a pedestrian underpass running under the tacks which could easily be reactivated. Security issues could easily be addressed with adequate lighting, a wide tunnel and 360 degree mirrors. The light spillover from a tunnel would be minimum".

Response

The pedestrian overpass is no longer proposed. See Response to Comment 1-44.

Comment 95-3

"In addition, the design of the ramps forces a person in a wheelchair to traverse 360 feet of ramp in order to cross 14 feet of track."

Response

See Response to Comment 1-44.

Comment 95-4

"It is the MBTA stated policy that for security reasons they will not build underpasses. It seems ironic that the MBTA has insisted that no neighbors should be concerned for their security, yet they insist on maintaining this policy."

Response

The pedestrian overpass is no longer proposed. See Sections 2.1 and 6.8 of this FEIR. Also see Response to Commonly Raised Questions (re: Station Security) in Section 8.1.

Comment 95-5

"Southborough has mentioned building a jogging track around the Cordaville Mill Pond. More than half of the pond is within the Hopkinton town border. This would require the taking of a section of our property (unless they build the track on stilts) as well as the construction of two bridges over the river."

Response

A jogging trail around the Cordaville Mill Pond is not proposed as part of this project.

Comment 95-6

"Hopkinton resident will suffer the same noise, air and light pollution, as well as traffic, privacy and security issues. Any steps at mitigation must include the residents of Cedar and Lincoln Streets."

Response

No noise or air quality mitigation is required for Southborough or Hopkinton from the Southborough Station. Parking lot lighting at commuter rail stations will include "cut-off" type fixtures which will direct lighting away from abutting properties. The roadway and intersection improvements proposed for Route 85 at the Southborough Station will remediate impacts from traffic traveling on Rte. 85 in Hopkinton. Issues pertaining to security are discussed under Commonly Raised Questions in Section 8.1.

Comment 95-9

"Increased access to the Sudbury River and Mill Pond are among Southborough's ambitions. We agree with this concept, however, we are concerned that this will increase our noise and light pollution - especially during the winter months when the trees are bare. The parking lots will be lit with high intensity lights until 1:00 A.M. Mitigation in the form of tall conifer trees as well as light poles kept to a minimal height must be part of the design."

Response

See Response to Comment 95-6.

Comment 95-10

"Some residents of Cordaville and the MBTA have suggested building a multi-level parking garage on the south side of the railroad tracks. The MBTA's own ridership projections show the parking lots to be oversubscribed by more than 100 cars on the day they open. There will be tremendous pressure on the MBTA in the future to expand the facilities. While the garage option is not currently being investigated, we would like assurances that it will not be built in the future."

Response

See Response to Comment 40-6.

Comment 95-11

"Southborough has asked the MBTA to reserve all 90 spaces on the north side for their residents only. They rationalize that if they have to put up with the traffic and pollution, they ought to be granted reserved parking. Along those same lines on thinking, Hopkinton should be granted 90 spots in order to compensate for the disruption of Cedar St./Lincoln St. residents. We object to the use of state bond money being used to create exclusionary parking."

Response

See Response to Comment 40-7.

Comment Letter No. 97

Dorothy McMahon (3/7/95)

Comment 97-1

"No recommendation for building, patrolling, or maintaining the property seeing as how the tracks and surrounding area are now maintained."

Response

The MBTA intends to build functional yet attractive commuter rail stations. The parking lots, platforms, and all station amenities will be carefully maintained in an effort to be good neighbors.

Comment 97-2

"We should not be forced to take on any added burden."

Response

See Response t o Comment 69-1.

Comment Letter No. 98

Jackie Adams (3/6/95)

Comment 98-1

"We do need a stop near by - but not Otis Street - too dangerous on Fisher Mill & Maynard Streets already!

Response

See Response to Commonly Raised Questions (re: Local Street Traffic) in Section 8.1 of this document.

RESPONSE TO COMMENTS ON THE MARCH 1996 FEIR MILLBURY STATION, GRAFTON STATION, RAILROAD OPERATIONS

The following individual comments are from the complete comment letters included in Appendix E which follow this response section. The Flint Pond Residents comment letters are also included in Appendix E, but no individual comments are responded to as explained at the end of Section 8.1 of this document.

Comment Letter No. 1

EOEA FEIR Certificate (6/14/96)

Comment 1-1

"As the Southborough Board of Selectmen points out in its comment letter, many of the concerns expressed by the Worcester abutters to the Millbury station are relevant to all proposed stations for this project (such as concerns about vandalism at parking lots, outsiders coming into a neighborhood, responsibility for policing and emergency response), and the MBTA must be consistent in developing solutions to address them at all stations. I request the MBTA to provide information on these issues in the FEIR on the Ashland, Southborough and Westborough stations."

Response

The MBTA is responsible for the proper maintenance and security of its commuter rail parking lots. The MBTA currently owns well over 100 suburban parking lots, and as such, will be implementing the same management practices, which have proven quite successful, at the Worcester Line Stations.

The MBTA seeks to establish a cooperative relationship with local law enforcement to respond to emergency issues or reports of criminal activity at stations. Based on experience at other stations, crime, or any need for police assistance, should be minimal

at worst. MBTA crime statistics, going several years back, show very little criminal activity at commuter rail stations. There is no reason to believe these suburban stations would prove any different. If, however, police response requirements are routinely more than a local police force is able to handle, the MBTA police force will be made available to deal with chronic problems (e.g., illegal parking).

Comment 1-2

"The MBTA and the Massachusetts Historical Commission have executed a Memorandum of Agreement (contained in Appendix H of the FEIR) that ensures completion of all historical and archaeological studies before construction begins. I find that agreement to be acceptable to address the MEPA scope. Summary results of all studies conducted under the MOA should be contained in the FEIR on the Ashland, Southborough, and Westborough stations."

Response

Summary results of all historical and archaeological studies for Westborough, Southborough and Ashland Stations are included in Sections 5.6 and 5.7, 6.6 and 6.7, and 7.6 and 7.7 of this Final EIR.

Comment 1-3

"The Final Section 61 Findings must report on the results of all further discussions concerning mitigation, and propose a final mitigation package."

Response

Final Section 61 Findings are included in Appendix C to address those project-related impacts which are the responsibility of the MBTA to mitigate.

Comment 1-4

"If the MBTA decides to eliminate the Millbury station from its plans, the FEIR on the Ashland, Westborough and Southborough stations should include a thorough analysis of the impacts of an expanded Grafton station."

Response

A Millbury Station has been eliminated from the current Worcester Commuter Rail Extension program. Grafton Station will not be expanded, although the number of parking spaces has increased marginally from 248 to 265 since the Draft EIR version. 265 spaces resulted from changes in layout and balancing (fill vs. excavation) of the site

as design progressed. Traffic impacts associated with the Grafton Station have changed somewhat due to the elimination of the Millbury Station and are presented in Section 2.2 of this document.

Comment 1-5

Re: Millbury Station: "Similarly, if a different site is proposed for the Millbury station, it also should be evaluated in that document."

Response

A Millbury Station, once proposed at Route 20 in preference to the Route 122 alternative, has been eliminated from the Worcester Commuter Rail Extension project.

Comment 1-6

"Additional measures that can be taken to address short-term parking problems (such as incentives for carpooling to the (Framingham) station, improved pedestrian connections to the Pearl Street garage or use of satellite lots and shuttles) should be seriously considered and developed in coordination with local officials."

Response

Ongoing dialogue between the MBTA and Framingham Officials, including improvements associated with the Framingham Station Project, will help resolve the short-term parking issue. As part of the Worcester Extension project, an additional 95 parking spaces will be built in the south wye off Route 135. Also, the proposed parking garage at the West Natick Station will triple it's parking, thus relieving the Framingham demand.

Comment 1-7

"The FEIR states that discussions between the Town and the MBTA concerning the Framingham Station are continuing. I recommend that forum be used to address the remaining issues concerning the Framingham station that are mentioned in the comment letters from the Framingham Planning Department and the MetroWest Growth Management Committee. These include the provisions of a ticket kiosk at the station, a possible MBTA contribution to the rubberizing of the Bishop Street grade crossing, selection of a preferred alternative for mitigation at the Route 135/Route 126 intersection, and integration of station improvements with the Town's streetscape

program. The Final Section 61 Findings should report the results of the discussions with the Town and the full mitigation package."

Response

The MBTA has reviewed the possible provision of a ticket kiosk. Since the majority of tickets purchased are monthly commuter passes, a ticket kiosk will not materially reduce foot traffic across Waverly Street, but would present an ongoing maintenance and security issues.

Conrail under the auspices of MHD will rehabilitate the Bishop Street grade crossing early next year. The MBTA has held discussions and offered a mitigation alternative for the Route 135/Route 126 intersection but has not received concurrence from the Town of Framingham. The MBTA has also committed to integrate the station improvements with the Town's streetscape program.

The MBTA will include the current status of the results of discussions and mitigation package with the Town of Framingham in the Final Section 61 Findings included in this FEIR #3.

Comment 1-8

"The MBTA proposes to construct a 500-foot long noise barrier to mitigate impacts on those homes. No mitigation is proposed for the two remaining homes (in Grafton and Westborough). While provision of a noise barrier in those two locations may not be reasonable given its excessive cost (estimated at $64,000 per location), strong consideration should be given to providing receiver noise control (for example, additional window glazing, weather stripping)."

Response

The noise impact analyses evaluate outdoor noise levels, for which a barrier can provide mitigation. Physical modifications to individual homes is deemed unnecessary.

Comment 1-9

"The MBTA states that reducing train speeds would 'not meet the objectives of the project.' It is not made clear why this is so, and that alternative should be considered further."

Response

The objective of the project is to provide train service that will attract riders who now commute by auto. Train trips that are of equal or shorter duration than driving provide an incentive to switch mode of travel. Reducing maximum train speeds will increase trip times and have a negative impact on ridership.

Comment 1-10

"It is suggested in the FEIR that if and when an Ashland station is constructed, vehicle volumes at the impacted intersections may decrease, thereby offsetting the impacts of the gate closings. The MBTA proposes to study this issue further after a location is selected for the Ashland Station, and to propose additional mitigation in the EIR covering the Westborough, Southborough and Ashland stations."

Response

Potential rail patrons who now travel through Ashland were not deducted from area street volumes. When some drivers are diverted to either the north or south commuter parking lots, travel on area streets will be reduced depending on individual origins and destinations. Thus some double counting of vehicles tends to produce a worst case analysis. Such a scenario is not quantifiable but surely meaningful. A restudy of certain Ashland intersections and meetings with local officials has resulted in mitigation proposals which are presented in Section 7.12 of this Final EIR.

Comment 1-11

"The FEIR on the Ashland, Southborough and Westborough stations is the final document that is scheduled to be submitted under the Special Procedure for the Worcester Commuter Rail Extension. That report should address any issues that remain from any of the previous EIR or NPC reviews, respond to comments on the current FEIR and summarize mitigation measures proposed for the entire project. A proposed implementation schedule for each mitigation action should be provided. All Section 61

Findings for the project should be included in the FEIR, in Draft or Final form, as appropriate."

Response

Consistent with this mandate from the Secretary, this document addresses outstanding issues from the 11/94 DEIR and the 3/96 FEIR and includes summaries of mitigation commitments in the form of either Draft or Final Section 61 Findings (See Appendix C).

Comment Letter No. 2

Massachusetts Senate/Senator Matthew J. Amorello (6/5/96)

Comment 2-1

"I respectfully request that no action be taken to build a train station in Millbury until the concerns of the citizens of Worcester are properly resolved."

Response

The MBTA has concluded that, due to the great concern expressed by residents in the area, a Millbury Station will not be built as part of the current Worcester Commuter Rail Extension program. (Letter from MBTA General Manager to Senator Amarello in Appendix D.)

Comment Letter No. 3

House of Representatives/Representative Paul Kollios (6/4/96)

Comment 3-1

"Due to the impacts associated with the Rt. 122 access road, public sentiment in Millbury is more in line with an access road off Rt. 20 in Worcester. While the proximity of the Rt. 122 alternative to the Mass. Pike entrance and Park-and-Ride area would make for a logistically sensible transportation mecca, it would involve the mitigation of significantly more environmental impacts than the Rt. 20 access road."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment Letter No. 4

DCPO - Gina B. Dailey, Assoc. Gen. Counsel (5/13/96)

Comment 4-1

"Please let me know if you require any further information about this disposition in order to include the disposition in the Certificate of the Secretary of EOEA, so that we may satisfy the requirements of MEPA with regard to the disposition of the land by DCPO to the MBTA."

Response

In the Secretary's Certificate dated 6/14/96, it was approved that the March 1996 Final EIR was sufficient environmental documentation such that no Environmental Notification Form would be required for the land transfer in Grafton. The land for the Grafton Station has been transferred recently in ownership to the MBTA and the deed has been recorded at the Worcester County Registry of Deeds.

Comment Letter No. 5

Department of Food and Agriculture/Marcia Starkey (6/4/96)

Comment 5-1

"The Department has reviewed this Final Environmental Impact Report with respect to agricultural issues. The stations at Millbury and Grafton have been identified as having potential to offset project-induced growth which can adversely affect agricultural resources in these locales."

Response

Although the proposed commuter service west of Framingham could stimulate some minor population growth, the potential effect on agricultural resources will be minimal. Also see Response to Comment 33-10.

Comment 5-2

"the MBTA has requested that the Bureau of Markets provide profiles for farmer's markets suited to the Millbury and Grafton stations, as well as identification of priority market locations on other MBTA lines."

Response

The MBTA intends to continue dialogue with the DFA toward the establishment of farmer's markets, not only on the Worcester Extension but on other commuter lines. The MBTA Real Estate Department will take the lead in any such efforts.

Comment Letter No. 6

DEP Central Region/Mary Richards (5/24/96)

Comment 6-1

"In the Division's original comments of March 9, 1995, a few questions were raised relative to identification of all the existing public (and private) water supplies along the Railroad Right-of-Way. The responses to those questions were included in this FEIR along with a copy of the Vegetative Management Plan (VMP) and Yearly Operational

Plan (YOP) for Conrail. In review of the responses and these documents supplied, the Division acknowledges that the issues that were originally raised pertain directly to Conrail and not the Mass Bay Transportation Authority nor the Commuter Rail Extension Project it has proposed here. However, the Division feels it is necessary to express a concern it has with the process by which YOP's are approved, since this project brought it to our attention."

Response

It is clear that the concern expressed regarding the process by which YOP's are approved falls outside of the MEPA process and is beyond the control of the MBTA. For other projects where the MBTA is both owner and operator of the rail line, we will strive to prepare a comprehensive YOP and follow all the requirements of Massachusetts ROW Management Regulations 333 CMR 11.00.

Comment 6-2

"Finally, the third FEIR should address the remaining issues raised by the Division (Comments 8-24 through 8-27). It is appropriate that they be addressed in the next FEIR which will cover Ashland, Southborough, and Westborough stations."

Response

See Response to Comments 8-24, 8-25, 8-26, and 8-27 under Response to Comments on the November 1994 DEIR in Section 8.2 of this Final EIR.

Comment Letter No. 7

Mass. Highway Dept./Peter J. Donohue (6/6/96)

Comment 7-1

Re: Millbury Station: "The FEIR does not include any traffic volumes or analyses for the adjacent intersection making it difficult to determine whether the two locations can function adequately in a coordination manner. This issue was the primary reason that traffic signals were not approved at this location during the development of the retail facility. Also missing from the FEIR are plans illustrating the proposed improvements."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 7-2

"The FEIR indicates that the location will satisfy traffic signal warrant criteria for the PM peak hour of Route 20 and the PM peak hour of the project. Based on a review of the traffic volume projections, it is clear that the warrants for these periods are met by the volumes of traffic exiting the existing retail facility rather than the commuter rail station. Vehicles leaving the retail facility currently must turn right. If the restriction is retained, the need for traffic signals at this location is diminished."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 7-3

"The proposed site drive should initially be constructed without traffic signal control. The site drive approach should be constructed to provide two lanes, one for left turn and through movements and on for right turn movements leaving the site. To facilitate future installation of traffic signal control, conduit should be placed beneath the driveway."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 7-4

"Once the commuter rail station has been constructed and ridership stabilizes, it would be appropriate to conduct further traffic volume counts and analyses at the site drive intersection and at the adjacent intersection of Route 20 with Sunderland Road/Westboro Street to determine the need for and appropriateness of traffic signal installation.

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 7-5

"The aforementioned issues can be addressed through discussions with the MBTA during the permitting process. Therefore, the MHD does not believe that further review of the project's traffic impacts at the Millbury station is necessary under the MEPA."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment Letter No. 8

Massachusetts Historical Commission/Judith B. McDonough (6/7/96)

Comment 8-1

"MHC is awaiting the results of archaeological investigations that have been conducted for the proposed Millbury and Grafton stations. MHC understands that a revised permit application (950 CMR 70) for archaeological investigations to be conducted at the proposed Ashland, Westborough, and Southborough stations is being prepared for submittal to the State Archaeologist. The Draft MOA provides a means to implement the archaeological investigations, and allows the continued opportunity to locate, identify, evaluate, and avoid, minimize or mitigate impacts to significant archaeological resources that may be present at the proposed station sites. MHC looks forward to continued consultation during this review."

Response

The report on the Millbury and Grafton Stations archaeological investigations was submitted to MHC and subsequently approved. Due to a lack of any significant historic or prehistoric archaeological deposits, no additional testing was recommended. The revised permit application for intensive archaeological investigations at Ashland and Westborough and for the Southborough site evaluation were submitted and approved by MHC. To date, no significant historic or prehistoric resources were recovered from the Westborough and Ashland Station sites. The remaining archaeological investigations at the Southborough Station site are in progress. A combined report on all three stations will be submitted.

Comment Letter No. 9

Massachusetts Audubon Society/E. Heidi Roddis (6/6/96)

Comment 9-1

"Stormwater basins should be designed not only to manage the hydrologic impacts of creation of impervious surfaces, but also to remove pollutants from runoff generated by station access roads and parking areas. The basins should incorporate water quality improvement features such as sediment forebays and long, shallow flow routes through the basins. Wetland vegetation such as cattails should be established within the basin,

so that water will filter slowly through the vegetated area before being discharged. Discharge areas should also be designed to be gradually sloping, and vegetated with grasses or other plants to further slow and filter water. The discharge points should be as far from the edge of natural wetlands or waterways as possible, allowing flow to travel through vegetated upland and/or buffer areas before reaching wetlands."

Response

Stormwater Management Facilities at each station site will provide for pollution attenuation as well as mitigation of peak stormwater flow rates. Stilling basins (sediment forebays) are proposed at the end of each drain pipe as it enters the detention basin. Refer to the applicable sections of the FEIR for specific descriptions of stormwater basins, including proposed vegetation within the basins, at each station site. In all cases, the proposed designs will be subject to final review by the local Conservation Commission.

Comment 9-2

"Plans for detention basins should incorporate provisions for future maintenance, such as access for machinery to clean out the stilling basin area. The access should be maintained as a grassy area through regular mowing. While it is often necessary to site basins within the buffer zone, the edge of the basin should be set back from the wetland edge to allow permanent protection of some portion of the naturally vegetated buffer. Basin plans should include construction details showing how the basins will be built without having heavy equipment encroach on nearby wetlands during grading of basin berms."

Response

All stormwater detention basins will either be accessible from adjacent roadways, driveways, and parking areas and/or will include construction of a 10 foot wide vehicular access drive around the top of the basin for maintenance purposes. Permitting plans submitted to the local Conservation Commissions will include erosion and sedimentation elements and sequence of construction plans detailing minimization of potential construction related impacts.

Comment 9-3

"The Millbury site access road is located off Route 20 and will be 3,000 feet long. This road will provide good access for vehicles, but will not be easily accessible by bicycles and will be virtually unusable for pedestrians. The station itself, however, is located very near residential neighborhoods, including the new subdivision adjacent to the station and neighborhoods in the vicinity of Grafton Road/Route 122. The plans for the station should incorporate provision for pedestrians to enter the station site directly from these neighborhoods."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 9-4

"Since there will be a pedestrian crossover bridge over the tracks to allow access to both platforms, it may also be feasible to arrange a similar pedestrian access point connecting to Route 122. These pedestrian/bicycle access points should be studied further and implemented if possible."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 9-5

"Transportation Bond bills have allowed Massachusetts Highway Department to replace bridges within essentially the same alignment and have exempted such projects from requirements of the Massachusetts Wetlands Protection Act. However, this exemption should not apply to projects such as the Pine Street replacement where the bridge design is being altered from present heights and alignments in order to accommodate double-stacked freight. The Society requests that the wetland impacts of all of the improvements for the freight rail clearance improvement project be required to be reviewed in a single comprehensive document under the Massachusetts Environmental Policy Act (MEPA).

Response

The Pine Street Bridge is being replaced by MHD concurrent with development of Grafton Station. It is not a component of the MBTA Commuter Rail Project. The Pine Street Bridge will cost approximately $1.5 million dollars, and last 50 years or more. It

only makes sense to reconstruct bridges with clearances that address long term railroad needs as well as highway needs.

Comment Letter No. 10

MetroWest Growth Management Committee/Kathleen B. Bartolini (6/7/96)

Comment 10-1

"We also accept the cost figures provided in the FEIR by the MBTA relative to their financial capacity to undertake this project. However, they do repeatedly state there is a bond authorization of $78 million for the project and then quote an $80 million cost figure. This $2 million short fall should be addressed."

Response

The MBTA has demonstrated to the Secretary's satisfaction the financial feasibility of this project. How the MBTA meets these costs is, with all due respect to the commentor not properly before MEPA.

Comment 10-2

"If no major noise or vibration mitigation is being proposed, only $80,000-85,000 for a sound barrier in Grafton, then what is the $1.2 million for, which is identified as noise and vibration mitigation?"

Response

The $1.2 million estimate is being carried until this FEIR #3 is approved. Monies not required under this line item will be used to lower the overall project cost.

Comment 10-3

"The layover facility is really much more expensive than indicated, because land acquisition is not included in the $5,050,000 subtotal. How much of the $7 million is for land acquisition from Conrail? Site work has begun there so you must own the land.

Downtown Worcester property is valuable. How much remains for the four remaining stations, assuming a $1.00 land transfer from DCPO to MBTA for Grafton station?"

Response

Land acquisition cost for the layover was approximately $250,000, leaving approximately $4.75 million for the remaining three stations. Overall land acquisition costs have been reduced with Millbury dropped from the project.

Comment 10-4

"How much will the Grafton and Millbury stations cost? Why is there no detail budget for them in this FEIR?"

Response

Individual station cost estimates are included in Table 3.6.1 in FEIR #2. More detailed estimates of construction cost will be developed as the station designs progress.

Comment 10-5

"What is the projected land costs for the Millbury station given its commercial zoning on a highly developed area of Route 20 and the need for a 3,000 ft.± access driveway? Will this be cost effective given the $3.3 million for station development and only 149 riders projected for 1997?

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 10-6

"Please note Table 2.1-9 vs. Table 2.1-8. The first says there is $7 million for land acquisition and the second says only $6 million. Which is accurate? We are concerned that there is sufficient funds remaining to acquire land in Westborough, Southborough and Ashland where land values are higher."

Response

$7 million for land acquisition is correct. See Response to Comment 10-3.

Comment 10-7

"The MBTA cites a 42% cost recovery for this line which is great. However, many want to control the amount of money the Legislature needs to appropriate to subsidize the T's budget. Thus they want not only operating costs, but capital costs as well, to be calculated in the 35% guideline. This project will meet 33% with capital costs included, which is another strong point in its favor?"

Response

The MBTA acknowledges the cost-effectiveness of the Worcester Commuter Rail Extension project.

Comment 10-8

"Millbury has never argued strenuously for a station and only wants it if the access is in Worcester. There is a nearby residential subdivision in Worcester and both those residents and many city leaders have opposed this 'Millbury' station."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 10-9

"Most importantly, no ridership is lost from the line if the station is not built. It is re-allotted to Worcester and Grafton. Grafton is agreeing to the Worcester Business Development Corporation proposal for a major bio-tech office park near their station. They are already preparing for major influxes of traffic and could handle the 70 or more riders who would shift to the Grafton station."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document. The increase in ridership at the Grafton Station, due to the elimination of a Millbury Station, adds 132 patrons of the 149 who would have used the Millbury Station. The new total Grafton ridership of 248 will create a demand for 200 parking spaces in mid-1997.

Comment 10-10

Re: Framingham Terminal: "MetroWest Growth Management Committee, while being supportive of downtown businesses, must support Alternative Design #1 despite the loss of 10 on-street parking spaces. The chaotic situation which exists now, results in many more than 10 spaces being lost to illegal parking by MBTA users. To expend money to reduce a 300+ second delay down to over a 200 second delay does not make sense, when the delay can drop all the way to 30 seconds under Alternative #1."

Response

The Town of Framingham must make the final decision regarding loss of on-street parking.

Comment 10-11

Re: Framingham Terminal: "The MBTA simply addresses the Bishop Street grade crossing by saying the town is handling it. The Town has a PWED grant for feasibility and design. However, much of the delay at this crossing is directly attributable to the grade closings for trains which will now be more frequent with Basic Service in later 1996. The Town has officially asked the T to defray the cost of rubberizing this grade crossing since they are negatively impacting it. This must be addressed."

Response

The Bishop Street grade crossing will be rebuilt by Conrail under MHD funds next year.

Comment 10-12

Re: Framingham Terminal: "We do not support the ridership projections offered for Framingham in 2001 after five stations open west of the town. The T's contention that Framingham will have less riders in 2001 then it did in 1994 prior to Interim Service fails to acknowledge local and subregional growth and TDM efforts by our TMA, the Town and MetroWest Growth Management Committee to get people out of their cars. Interim Service saw a 40% increase in ridership with no T marketing program. All marketing efforts were focused on a new Worcester stop. Admittedly the MBTA did not expect ridership changes in Framingham and did not advertise the new express services. A 40% increase occurred anyway.

Response

The MBTA understands the concerns about patronage at the Framingham Station. While we believe, in accordance with ridership projections by the CTPS, that opening new stations west of Framingham will reduce ridership and related parking pressures at Framingham significantly, plainly the situation bears monitoring which will be performed during regular train audits.

Comment 10-13

Re: Framingham Terminal: "Basic Service this year will not see similar ridership increases, because parking is "maxed out." However, if new parking were provided, additional ridership can be obtained by marketing the Computer Check program and educational programs about money saved in: tolls; Boston parking fees; lost drive time opportunities; and stress avoidance, especially during Central Artery construction. The MBTA should be funding these marketing and public education programs, as well as, expanded LIFT services to the station via direct grants to Framingham and/or the MetroWest Transportation Management Association."

Response

When new intermediate stations are due to come on line, the MBTA will undertake the marketing and education process necessary to advertise the new service. Framingham is integral to the Worcester Commuter Rail line and would be an important element in this process. Expansion of the LIFT services could be a subject of discussion with the MBTA if the situation warrants.

Comment 10-14

Re: Framingham Terminal: "Why is the MBTA using computer models regarding current town distribution of riders? They have pre-existing license plate surveys. They could do an update of this survey and one would know where riders used to come from versus where the Interim Service is drawing. This would help to verify projections regarding diversion of 50% of the riders to the west with BASIC Service or help to show this won't happen."

Response

The computerized forecasting models used by CTPS make use of passenger surveys and license plate surveys extensively. The models are first calibrated to simulate current travel patterns. Several outputs of the model such as percent of passengers arriving at the station by car, kiss and ride mode and walk mode, distribution of riders by origin town, average auto occupancy etc., are checked against observed data. If the simulated numbers differ greatly from observed data, several calibration adjustments are made to the forecasting models until they replicate observed conditions with reasonable accuracy.

Comment 10-15

Re: Framingham Terminal: "We strongly recommend a ticket kiosk at the Framingham station. Presently, riders must go to a store along south side of Waverly Street to purchase ticket. There is a surcharge on tickets bought on the train. This results in hundreds of people parking either at town garage or T parking lot, both on North side of tracks, then crossing tracks and then crossing Waverly Street, purchasing ticket and re-crossing Waverly to get back to train station. An ATM type of kiosk dispensing tickets would help resolve this design flaw."

Response

The MBTA has no immediate plans to change the existing ticket system. Since the majority of tickets purchased are monthly commuter passes, the foot traffic across Waverly Street is normally only once a month. The MBTA looks for private vendors to handle ticket sales in a secure manner. The MBTA cannot justify the full-time staffing of a ticket facility. The MBTA reviewed ticket kiosks, however they require on-going maintenance and include security issues not present with private vendors.

Comment 10-16

"It should be noted that this FEIR makes a major change from the DEIR. The DEIR proposed and analyzed BASIC service and an Expanded Service. Buried in the Appendix, it states that this FEIR no longer addresses or proposes expanded services. There is no discussion of why this change of decision was made.

Response

In the DEIR, Expanded Service was only proposed for possible future implementation. The expanded schedule was used for air quality analysis, corridor noise analysis and to address gate closing issues. After the analysis was completed, expanded service was deemed too expensive with too many air quality impacts to be feasible. In the July 1995 FEIR (Railroad Right-of-Way and Layover Facility) and in the March 1996 FEIR (Millbury Station, Grafton Station, and Railroad Operations) all references to an expanded service were deleted. The proposed project includes only the Basic Service schedule.

Comment 10-17

"This FEIR says 15 homes will experience vibration impacts but no Best Available Control Technology is cost feasible to resolve the impacts, therefore, no mitigation is being offered.

First, there is no discussion in lay terms of what this vibration is and/or how disruptive it will be to people's lives. We are simply told it is low frequency and ground-born but it will not cause a structure impact. What impact will it carry? One needs to know before one decides it is not worth spending money to remedy it."

Response

The effects of ground-borne vibration include "feelable" movement of the building floors, rattling of windows and walls, and "rumbling" sounds. Annoyance with vibration often begins when the vibration exceeds the threshold of perception by about 10 dB. For a single receptor, the duration would be approximately 15 seconds, the time required for the train to pass the receptor.

Comment 10-18

"Second, the CAC requested that the CAC be provided a map of the rail ROW with structures (residential/commercial) depicted within 50 feet of the track. This map could be used for both vibration and noise impact to see where these structures are located relative to the rail. None of the towns can understand how so few units can be impacted when they are built in a straight line with similar setbacks from the tracks. To state that

the Rail ROW is 66 feet wide and no homes are in the right of way is misleading. Structures are closer than 60 feet from the tracks in the MetroWest Towns of Ashland and Southborough. Why are so few impacted?

Response

The requested maps of impacted structures were included in the March 1996 FEIR. (See Appendix F, page 16 and following.) Building setbacks from the tracks are not uniform, nor is the distance from tracks to limit of impact uniform.

Comment 10-19

"You also provided a Table 5.2-5 that says four homes in Southborough will experience an impact and none of Ashland. Then the text says Ashland is heavily impacted but is silent on impacts for Southborough. Is this a typo or error? See page 5-28 versus Table 5.2-5.

Response

The text on page 5-28 is an editing oversight. The sentence refers to impacts that would occur if there was no station stop in Ashland.

Comment 10-20

"On page 3-26 the last sentence still offers the potential of ballast mats for mitigation, yet the section on vibration says they are not feasible. This inconsistency needs to be addressed, just as a better explanation is needed on why the inconsistencies regarding similar proximity to track are not resulting in similar impacts. At CAC we were told map could be done to clarify. Why was it not done? (There is a note in Appendix M regarding in this map but it was not forwarded to us for review.)

Response

Maps were included with the FEIR, in Appendix F. As a general statement of policy, ballast mats would be considered for mitigation. In this particular instance, as described in the EIR, ballast mats would provide little benefit and are not recommended. The extent of vibration impact is partially dependent on train speed, thus properties at the same offset but different locations may be exposed to different levels of vibration.

Comment 10-21

"The reviewer is referred to Appendix F for more vibration details. This reviewer never received any lettered appendices. I received two volumes and assumed as Vice Chair of the CAC I received every document referenced. It was not until late in the review period after reading every page in the two volumes I learned that the MBTA failed to provide the required MEPA documentation. I checked with officials in Ashland, Southborough and Framingham and learned that none of them had the needed materials either."

Response

Appendix F, Noise and Vibration Technical Memorandum, along with the other lettered appendices A through I are listed in the Table of Contents (page toc-iii) in the March 1996 Final EIR - Millbury Station, Grafton Station, and Railroad Operations - and bound in that document.

Comment 10-22

"Why does this FEIR dismiss out of hand reducing train speed as a way to mitigate for noise and vibration impacts. It certainly is a low cost solution. Freight trains have not been going through at these high speeds previously and Interim Service has been slower due to train traffic and the lack of two tracks for an 11 mile distance. Track improvements will enable higher speeds but cause other problems. This should be analyzed in an FEIR."

Response

Reduction in train speed from 50 to 30 mph would reduce maximum noise levels from the locomotive by 2 dBA, a barely perceptible difference to a listener. This speed reduction could add 30 or more minutes to the trip between Boston and Worcester, and make the train less attractive versus commuting by auto.

Comment 10-23

"Also, page 5-31 seems to say in the Receiver Vibration Control Section that purchasing the isolated properties or an easement is a viable form of mitigation. You said when 'mitigation costs more than the property, acquisition is most cost-effective.' Then why

isn't this mitigation offered regarding scattered sites. It is justified in the FEIR and then just dropped without explanation."

Response

Costs of ballast mat installation, given in the Draft EIR, are approximately $75,000 for an isolated residence. It is most unlikely that any of the impacted residences would have fair market value as low as $75,000. Acquisition of impacted residences would be an option only if the cost of acquisition was less than the cost of effective mitigation.

Comment 10-24

"The only mitigation offered is track maintenance. The reader is not told, however, how much of a decrease in noise and vibration will be achieved for the nearby property owners. It appears maintenance will only ensure it doesn't get worse versus helping it to get better. This is not mitigation."

Response

The EIR text explains why other forms of mitigation are infeasible.

Comment 10-25

"The same problem exists regarding noise impacts. The data must be in the missing appendix because the two volume FEIR does not contain information necessary to assess the adequacy of analysis and the lack of mitigation, other than a sound barrier in Grafton."

Response

See Response to Comment 10-21. In depth noise analyses were provided in the Draft EIR and re-evaluated in FEIR #1 and FEIR #2 to address comments and alternative station scenarios. The data needed to assess the issues have been presented for review.

Comment 10-26

"Much more attention to horn blowing is needed for all grade crossings, especially in Ashland. The T is causing more gate closings during early morning and late nights. They have an obligation to resolve this problem. Stationary horns are not the untested technology they would have you believe. We request stationary and "self-adjusting" horns as Best Available Technology which is cost feasible."

Response

Horn blowing at grade crossings is the subject of ongoing study and analysis by the Federal Railroad Administration. Until and unless regulations are amended, horn blowing remains mandatory.

Comment 10-27

"It states on page 5-14 that 'A standard theoretical model was used to predict existing and future noise levels.' This is unacceptable. Actual noise levels should be monitored at sites all along the proposed extension to determine current ambient and then determine impacts based on train impacts in increased decibels."

Response

Noise measurements were taken of several sites along the corridor to establish existing levels and were reported in the Draft and Final EIRs. These measurements are used to verify that the theoretical model predicts realistic noise levels.

Comment 10-28

"Taking average day and night computer models also averages in the quiet times when trains are not passing. The impacts should be based on the ambient for time of day additional trains from Interim and BASIC service will be going through. For example, if there was no noise prior to Interim service at 7:00 a.m. or 8:00 a.m. in Ashland and now there is train noise, then there is an impact. If the impact is greater then five decibels, then it has to be mitigated. You don't need to use theoreticals for existing noise, you can and should meter it. Models are for future projections."

Response

Models for future projections are calibrated by comparing calculated existing levels to measured existing levels to ensure the accuracy of future projections. The noise criteria established for determining impacts use a 24 hour basis. The 10 dBA penalty for late night/early morning noise is employed to address the very concern expressed by the reviewer.

Comment 10-29

"Please note that noise and vibration issues were not resolved in FEIR for Interim Service, but were to be analyzed better in this FEIR, so impacts need to be calculated prior to Interim Service being instituted."

Response

The FEIR for Millbury and Grafton Stations addressed noise and vibration issues raised in the DEIR and FEIR #1.

Comment 10-30

"The appendix, which was provided, addresses commercial data for the Ipanema Restaurant and Fitzgerald General Store. It appears that there will be internal vibration and noise problems for at least the Ipanema. Certainly a business where people go to dine and relax with friends has to be classified "an institutional use" under noise/vibration regulations."

Response

With provision of a station at Southborough, train speeds will be low. No significant noise or vibration impact is anticipated for either business.

Comment 10-31

"This same depth of analysis is needed for John Stone's Inn and Burnham's Restaurant in Ashland."

Response

Burnhams restaurant is located at Ashland Station where noise and vibration effects are minimal. John Stones Inn is located beyond the impact zone for noise and vibration.

Comment 10-32

"What is the perceived difference between severe noise impacts as opposed to noise impacts? How are people going to be bothered? What is the MEPA position on "impacts" versus "severe impacts?" Who says only severe impacts need to be mitigated? The FEIR fails to tell us what level of impact will be experienced by the houses along the track."

Response

An increase of 3 decibels is a barely perceptible change for most observers. An increase of 5 dBA or more would be noticeable, and is a threshold of impact. As described in the FEIR appendix, the FTA criteria also relate to existing noise levels in defining impact.

Comment 10-33

"We request that the DEP review the sound appendix omitted from the filing to determine how the data relates to Massachusetts Noise Regulations under their jurisdictions. The precedent for this was just established under a similar situation in the MetroWest area with M.W.R.A Water Supply Tunnel. M.W.R.A provided Technical Assistance funds to the potentially impacted communities through the MetroWest Growth Management Committee to purchase consulting services to review M.W.R.A.'s MEPA submissions on complicated and technical topics such as noise. No similar funding arrangement was offered by the T, so, we need DEP to help determine what decibel levels (day vs. night) need mitigating and what is the appropriate Best Available Control Technology.

Response

The MBTA would greatly appreciate the DEP weighing in on the appropriateness of the standard we used to measure and mitigate noise. A full copy of the FTA Noise Handbook can be supplied to the DEP for review. The MBTA welcomes comments on the guidelines, as well as our application of that standard to this project.

Comment 10-34

"It should also be noted that financial infeasibility is one of the criterion by which DEP says this project can be waived or altered. Thus quality mitigation should be costed out now to ensure well designed stations, off-site improvements and fewer long term impacts. Only by doing this now can we be sure the project is in fact 'cost feasible'."

Response

The MBTA will provide all the mitigation outlined in the Section 61 Findings that are finalized. Mitigation costs will not make the project financially infeasible. We note that feasibility, as referred to in the DEP regulations governing the project, refer to technical infeasibility (310 CMR 7.36).

Comment 10-35

"It seems odd that an entire chapter is offered on solving traffic problems generated at the Framingham Station, and then the T states there is no alternative but to establish similar problems for Ashland grade crossings. More discussion with the Town of Ashland is needed. If you can't find roadway solutions, what MBTA sponsored TDM alternatives would prove beneficial? It is ironic that TDM, is not discussed anywhere in the FEIR, although we require private developers to make TDM commitments and pay for MetroWest TMA to undertake mitigation projects."

Response

The MBTA will continue to consult with the Town of Ashland with regard to local traffic mitigation commitments that are warranted by this project. Sections 7.1 and 7.12 of this Final EIR discuss probable traffic effects and mitigation which will be employed. Provision of commuter rail services is itself a major commitment to TDM.

Comment 10-36

Re: Archaeologic and Historic: "This is a totally inadequate discussion. If the work is not done, but needed, then don't file the FEIR until the work is finished. The public is not being given a chance to comment on the findings. This is a closed inter-agency MOA, again not included in the two volume submission, but alluded to as if we had it."

Response

The Memorandum of Agreement (MOA) is listed in the Table of Contents (page toc-iii) in the March 1996 Final EIR - Millbury Station, Grafton Station and Railroad Operations - and bound in that document. All appropriate investigations, determination of impacts and required mitigation will be done to the satisfaction of the MHC.

Comment 10-37

To quote the FEIR (page 5-36), 'The Route 85 Bridge in Southborough warrants discussions.' That discussion should be more than seven lines."

Response

The Route 85 bridge is discussed also on page 3-24 of the March 1996 FEIR under project elements. Response to other comments on the bridge is included in this Final EIR. Also see Response to Comment 10-38.

Comment 10-38

"This was the first time the town officials saw the bridge design since the 30% stage, so much for community/public participation. This information also contradicts status provided on page 5-36."

Response

The Rte. 85 bridge replacement was presented and discussed in the July 1995 FEIR as part of the railroad right-of-way improvements. Updated information regarding the status of this project element was discussed on page 3-24 of the March 1996 FEIR. The discussion on page 5-36 of the March 1996 FEIR deals solely within the context of historic issues. In order to realize cost economies and to eliminate conflicts between adjacent contracts, the MBTA had intended to construct the bridge within the Southborough Station contract. With the separation of Millbury and Grafton from the

remaining three stations, it became necessary to accelerate the bridge construction to accommodate basic service. However, the bridge design has not materially changed from the 30% stage.

COMMENT 10--39

"The bridge is an historic gateway. The granite facade should be maintained. There should be more discussion of the 'facsimile granite' they are contemplating."

Response

The Route 85 railroad bridge will be reconstructed using genuine granite block facing on the abutments which parallel River Street.

Comment 10-40

"The Town and MetroWest has repeatedly opposed a pedestrian overpass at this station given the elevation of the tracks and the pre-existing underpass. We are pleased that the T plans to drop the overpass, but to channel all riders under the 85 bridge is too long a walk to parking and/or trains to encourage ridership, especially handicapped riders. The handicapped parking is no where near handicapped ramps planned to go under bridge."

Response

Handicapped parking spaces are typically positioned near the mini-high access platforms and the drop off (Kiss'n'Ride) areas. Although the path of travel is longer utilizing Route 85 as an underpass rather than a conventional overpass structure, the amount of vertical climb is considerably less.

Comment 10-41

"We repeat that an underpass is the only viable option for this station. What are the costs for an underpass versus these other alternatives, e.g., overpass and that shown in the 100% plan?"

Response

See Response to Comment 19-2.

Comment 10-42

"The issue of how high the bridge should be fails to mention the bridge is in a flood plain and already experienced flooding. Since it isn't feasible to raise the tracks, they want to lower the road. However, the road would be flooded even more often. It is not merely an issue of avoiding or enabling truck traffic as FEIR infers."

Response

Route 85 in the vicinity of the railroad bridge is in the floodplain as discussed in the Southborough Station Sections of the DEIR and FEIR, and floods to an elevation of approximately 236.5 during a 100 year storm event. If the roadway were ever lowered to provide increased clearance, the road would not flood more frequently but would flood to a larger extent towards the Southville Road intersection.

Comment 10-43

"The FEIR appendix, responding to DEIR comments, says there will be no detour while the Route 85 bridge work is done. This week they told us sometimes the road under bridge will be shut down. Traffic will be diverted from Southborough to Ashland's Howe Street Bridge to get to Hopkinton. This FEIR does not analyze this, but it should."

Response

The majority of work associated with the Route 85 Bridge reconstruction (support of excavation, abutments, wingwalls, track reconstruction, etc.) can and will be done without the need to detour traffic. The roadway may be temporarily detoured for small periods of time (days not weeks) when the existing bridge is removed and when the new bridge girders are being set.

Comment 10-44

"We were told in DEIR no pile driving would be needed, thus no undue construction noise. They now know they need piles. Why isn't a Notification of Project Change being filed versus going out to bid in June? What will be the noise impacts of construction on homes and businesses?"

Response

The referenced piles are required for excavation support. Although not previously anticipated, the piles will be installed in drilled holes, not driven into place.

Comment 10-45

"The Route 85 Bridge, if kept on proposed schedule, won't be done until sometime in 1997. We are told Conrail won't let BASIC Service commence until bridge is completed. Therefore, time frames offered in this FEIR are wrong for Grafton and Millbury service."

Response

The statement concerning the Route 85 bridge schedule is true. Such a minor change in timing will create no new or different environmental effects. Such a delay would be compatible with the new proposed Grafton Station opening in mid-1997 and the Westborough, Southborough, and Ashland Stations opening by the end of 1997. The time-related impacts are addressed under the relevant sections of this Final EIR.

Comment Letter No. 11

City of Worcester/Thomas R. Hoover, City Manager (6/6/96)

Comment 11-1

"The City of Worcester wishes to notify you of City government's grave concern regarding the poor quality of the FEIR in its lack of information and failure to adequately address in the project design both traffic impacts to the Route 20 area and residential abuttor siting impacts from the Millbury station access road location proposal."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-2

"Site Selection - The document states in Sec. 3.1, Pgs. 3-11 that "the MBTA has selected the Route 20 site as the preferred location '...(to) reduce the potential impact to local traffic...'. This statement is too vague and the lack of detail causes concern in light of the information supplied for accidents on Route 20."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-3

"Accident Data/Route 20 - The FEIR does not supply accident information which is important to determine the effect of a new signalized intersection in the area. The FEIR also does not include any accident information for the Route 20/Route 122 interchange. The majority of additional traffic volume generated by the new station will be using the ramps of this interchange."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-4

"New Signalized Intersection - Signalized control of the new access road will be required. The proximity of the new access road to the intersection of Route 20 and Sunderland Road, the mall traffic at the proposed access road site and the volume of traffic entering and exiting the access road within a short period time will contribute to the demands for the signalization. The FEIR does not note any discussion or agreement with the Mass. Highway Department which maintains authority over this roadway. Their agreement and approval will be required."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-5

"Route 20 - The FEIR states that contributing factors for the accidents reported on the section of Route 20 between Sunderland Road and the Route 122 interchange may be poor channelization and high speed and also uncontrolled access and turns against moving traffic. However, the document does not at all address these problems."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-6

"The MBTA should coordinate with the Mass. Highway Department to propose within the FEIR document mitigation which might include centerline divisions, sidewalk and curb cut revision and merge lanes for the Route 122 interchange ramps. The City of Worcester believes it to be critical that the FEIR accident data be broadened to include the lengths of Route 20 and Route 122 along the entire area and for the past five (5) years."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-7

"While the additional volume at peak hours may not be great enough to lower the LOS, it will significantly change the data for that intersection. Secondly, while the new station has not caused the current conditions, it also does not improve the situation. The MBTA should coordinate with the Mass. Highway Department to propose mitigation within the FEIR document which would include general improvements to the interchange."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-8

"An LOS of D for this driveway is acceptable but an agreement would be required with the Mass. Highway Department to insure that the signal timing was not altered in the future to reduce the queues on the driveway in the PM peak."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-9

"The LOS for the "Build Millbury Only" scenario should be reviewed. Our experience with the interim service area on Shrewsbury Street in Worcester tells us that 347 commuters exiting one driveway during the PM peak may be more problematic than the data suggests."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-10

"The city hereby requests receipt of a copy of this previous MEPA determination and requests that MEPA determine whether or not the proposed commuter rail station proposal necessitates amendments to the Big Y MEPA certificate conditions."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-11

"Dalton Street/Blithewood Avenue - The FEIR fails to address the proposed project's affect on the scheduled signalization on Grafton Street at Dalton Street and Blithewood Avenue."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-12

"Definitive Subdivision Plan Review - The FEIR does not acknowledge that the applicant will be required under MGL Chapter 41 to submit a definitive subdivision plan application to the Worcester Planning Board for review and approval of the new 3,000 foot long station access roadway off of Route 20."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-13

"Neighborhood Residential Impacts - On Page 6-1 the FEIR states regarding the project that there does not appear to be any substantial negative effect on this neighborhood. Section 6.8 (Pages 6-36 and 6-37) of the document also states that combined landscaping and lighting design mitigation should limit project effects on site neighbors. Both statements are extremely vague and lack any substantiated design information or detailed mitigation proposal to address the project's obvious negative visual, lighting and noise impacts upon abutting residences. MEPA should require further information and analysis of these issues as part of a revised FEIR and require mitigation proposals on these items to be included in the FEIR."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-14

"Furthermore, the FEIR does not acknowledge the number of children living within the residential neighborhood and the attendant safety concerns associated with them. The City of Worcester requests that MEPA require the FEIR to provide a comparative analysis of lots being impacted by this proposed Worcester accessed station as opposed to the facts shown for the abandoned Millbury accessed site."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-15

"Conservation Commission Review - The document states on Page 6-41 that project elements will be reviewed by the Worcester Conservation Commission. To date, the project has not been submitted for Commission review. The FEIR should reserve the right of City government to raise any additional project design issues not raised or addressed at this time via the local Conservation Commission review process and within other local project permit review processes as mandated by state and local ordinance."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-16

"Access Road Maintenance/Ownership Issues - The FEIR does not address ownership or maintenance issues and responsibilities for the new 3,000 foot long station access roadway off of Route 20. The city does not have the capacity to handle maintenance and security of this access road."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 11-17

"Deficient CAC Process - The City of Worcester notes as part of this FEIR comment that the City considers the Commuter Rail Project CAC to be conducting a review process that is unfair to Worcester residents and officials and requests that MEPA mandate the CAC to involve a more comprehensive and participatory review from area residents proposed to be impacted."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment Letter No. 12

City of Worcester/Paul. P. Clancy, Jr., Councillor - District 3 (5/31/96)

Comment 12-1

"The intersections in the immediate area of the proposed signalized intersection of the Millbury station's access road and Route 20 were not included as studied intersections (figures 6.2-1 and 6.2-2). These are serious omissions to any thorough study of local traffic impacts."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-2

"Those intersections that should have been included are:

a. Route 20, Sunderland Road and Westborough Street (Worcester)
b. Lake Avenue and Sunderland Road (Worcester)
c. Grafton Street and Sunderland Road (Worcester)
d. Route 20 and Massasoit Road (Worcester)
e. Route 20 and Edgemere Boulevard (Shrewsbury)

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-3

"These abutting, signalized intersections were probably not reviewed because the bulk of those studies for the originally planned access road at the Massachusetts Turnpike Interchange were simply recycled. It is inexcusable that any traffic study for the impacts of the proposed access road would not include those signalized intersections that are in the immediate vicinity of the proposed intersection."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-4

"The report does not address any improvements to the Route 20 and Route 122 interchange which is 1,750 feet from the proposed access road intersection."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-5

"Further, I would hope that any upgrades would consider signalization of the interchange on Route 122 (Grafton Street) for all Route 20 exits/entrances and the addition of a climbing lane on Route 20 for all traffic accessing Route 20 westbound."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-6

"Further, the most recent accident data was from the year 1993. Further explanation and research is necessary. Every effort should be made to collect current accident data regarding this stretch of Route 20."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-7

"Given what accident data is available, appropriate mitigation need to be stated to minimize the "uncontrolled access and turns against moving traffic," the "poor channelization," and the "high speed" which are all listed as contributing factors to the dangers of said stretch of Route 20. The addition of asphalt or granite curbing would give definition to the roadway and further limit access. Also, the addition of jersey barriers along this stretch of roadway would further limit the uncontrolled access and turns. Considerations on limiting speed need attention in this report."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-8

"I can find no references to the Stop and Shop (now Big Y) Final E.I.R. from the late '80's and subsequent conditions which restricted turns onto Route 20 at this same site where a fully signalized intersection is now proposed. This had been a recommendation by the City of Worcester in the Stop and Shop Final E.I.R, but was denied. Now, a new Final E.I.R. reports on the same site without reference to the Stop and Shop E.I.R. comments and conditions. I don't know why these previous conditions are not addressed in this report."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-9

"The presumptions of the traffic patterns on distribution map 6.2-4 "Build All Stations" scenario are most curious. It presumes that commuters traveling from Auburn, Charlton and Oxford would use Route 20. Yet, certainly, with easy access to both I-290 and I-90 in Auburn, Charlton and Oxford, it may be more convenient to travel I-90 to the Millbury exit or I-290 to Worcester (Grafton St. exit) to access the Worcester commuter train station. The presumptions in the report may be flawed."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-10

"Further presumptions are that Boylston commuters would use the Millbury Station and that no Shrewsbury commuters would use the Route 20 Millbury Station. Clearly, an explanation of why Boylston commuters would use this station and why no Shrewsbury commuters would use it (when the Shrewsbury town line is only about one-tenth of a mile from the proposed train station intersection) are in order."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-11

"There are no references to municipal jurisdiction for said station, parking lot and roadway. The station and parking lot are located in a remote section of Millbury while the proposed roadway from Route 20 rests in Worcester. Given the shared jurisdictions of said proposal, there needs to be clear cooperation agreements between the two municipalities."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-12

"Further, emergency response access and jurisdiction needs review as well as appropriate emergency access to site. Also, police response to site needs clarification. Given the remote location and the very close proximity to area homes (approx. 150 feet), formal policing procedures and restricted non commuter access to the site need to be developed."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-13

"The Hazardous Materials section of said report (pages 6-37 and 6-38) discussed "limited" environmental site evaluation. However, given the serious problems of the recent past with groundwater and well water contamination in the area associated with the Wyman-Gordon facility and given the site's sensitive location to both the Flint Pond and Lake Quinsigamond, both recently designated "Great Pond" sites, a more thorough and comprehensive study **should have been completed** for this report. The Final E.I.R. should not have been submitted without this vital environmental information. Our water resources are much too precious to be subjected to rushed and incomplete reports."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-14

"As an elected local public official, I have found this public process to be seriously flawed and compromised. The C.A.C. referenced above has three members from Worcester whose focus was the development of the Worcester commuter rail site at Washington Square in Worcester. The "Millbury" Station site impacts the traffic patterns, traffic study, wetlands, drainage, visual impacts, and potential hazardous waste migration directly on **Worcester**. To call it the Millbury Station is a misnomer because the bulk of all impacts rest with and in Worcester. As a member of the Route 146 C.A.C., I have found the Massachusetts Highway Department and the Massachusetts Turnpike Authority to be most informative about the proposed Route 146 roadway expansion plan. This is not true of the MBTA. At not time was I ever contacted by them regarding a significant impact to traffic, environment and transportation in my district. The Route 146 C.A.C. posts its meeting with the Worcester City Clerk's office. This is not true of the MBTA C.A.C. meetings. None were posted with the City Clerk's office, and as a result were not published in the local paper under agency meetings. To compound this lack of public notification was the practice of the **Worcester Telegram and Gazette** to publish news in various editions. Hence, the news stories about the location of the Millbury Station appeared on in the "Blackstone Valley" edition of the newspaper and **not** the City of Worcester edition. Therefore, any flow of information was seriously hampered. It was therefore paramount for MBTA officials to contact local elected officials."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 12-15

"The results of this process have been skewed to Millbury's concerns. The MBTA gave cursory treatment to the requirements of the C.A.C., but should have and could have done much more to open the process to all parties and individuals impacted by this project. In my nine years of public service, I have never experienced such a blatantly passive bureaucracy as the MBTA. Further, I better understand the public's contempt for governmental agencies that give priorities to their own agendas rather than working to achieve a fair, objective process that considers all the public good. For a public agency such as the MBTA to give special consideration to the parochial interests of the M.C.R.A.C. and further, to make recommendations that blindly ignore the existence of an abutting interest (residents of Flint Pond Village) is wrong."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment Letter No. 13

City of Worcester/Stephen T. Patton, Councillor - District 1 (5/31/96)

Comment 13-1

"Based on my evaluation, I am opposed to the proposed site and share my concerns as well as those of the residents with regard to safety and of participation in the process."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 13-2

"The revised location from the Draft E.I.R. came as a surprise to me. The original site met all of the use requirements and seems to have been moved based solely on the rejection of the site by the Millbury Citizen Advisory Group. There is no scientific rationale for the change and I recommend that the site proposed in the Draft E.I.R. be reconsidered."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 13-3

"The current location was selected without the inclusion of **any** local residents. This is clearly a violation of the intention of the E.I.R. process and any decision made without local citizen input should be rejected."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 13-4

"The neighborhood that the new site abuts is dominated by young families and the potential danger to children cannot be ignored without serious hazard."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 13-5

"I implore you to reconsider your siting decision and to take the time to carefully review either moving this site or eliminating it entirely. The distance from this location to either Union Station or the proposed Grafton Station would not be a hardship to many users and would greatly benefit the residents of this neighborhood."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment Letter No. 14

MBTA Advisory Committee, Millbury, Margaret Lavallee - Clerk (6/3/96)

Comment 14-1

"Archeological resources: This committee would like to see the report on the final study in Millbury."

Response

The intensive archaeological survey for the Millbury Route 20 Station site was completed, submitted to the MHC and accepted by them. Due to a lack of any significant historic or prehistoric archaeological deposits, no additional testing was recommended.

Comment 14-2

"Route 20 Access Road and Economic Enhancement - Provisions for water and sewer access would be economically beneficial to the city of Worcester and Millbury. The MBTA should work with Worcester and Millbury in arranging this prospect for economic development."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 14-3

"Safety: This committee does not believe the MBTA has adequately addressed the safety of people using the access road and train station in Millbury. It needs to be decided who will be responsible for patrolling the area - Worcester or Millbury Police? Due to the controversy over the Route 20 access road and the Millbury station location by Worcester residents, the MBTA needs to reaffirm who is responsible for the safety of the MBTA commuters at the access road and at the station."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 14-4

"Compensation for Town Services: Will the towns who provide services to the access road and the station site receive compensation from the MBTA for these services? Further clarification is needed by the MBTA on this matter."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 14-5

"Fire Hydrant: The Millbury Fire Chief has requested that there by a fire hydrant located in the parking area of the Millbury station. This committee advises the MBTA to address this issue."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 14-6

"This committee is in agreement with the MBTA's station site location off of Route 20 in Worcester. We would anticipate that the visual screening with vegetation and the careful control of lighting would limit impacts to those residents of the Flint Pond Development."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment Letter No. 15

Town of Grafton/Daniel J. Morgado, Town Administrator (6/4/96)

Comment 15-1

"The Board of Selectmen fully supports this proposal regardless of any action taken relative to the siting of a rail station in the Town of Millbury. The Board of Selectmen does not wish for the Grafton project to be delayed while siting options are further explored for a Millbury location.

This support is predicated on the understanding that the MBTA will take action to mitigate adverse traffic impacts upon the Rte. 140/Rte. 122/Bridge Street intersections known locally as "Quinsigamond Corner." It is the Board's expressed understanding that this mitigation will take the form of the MBTA and/or other State or Federal Agency or Program assuming the full cost of engineering, right of way acquisition and construction of the required signalization."

Response

The proposed mitigation is addressed in Section 2.2 of this Final EIR.

Comment Letter No. 16

Framingham Planning Department (6/7/96)

Comment 16-1

"The FEIR provides train, ridership and parking data. However, it would be helpful to the Town's present planning efforts, including the 126 Corridor Study presently underway, if additional specific information was supplied in a simple and readily accessible form. This information should include a delineation of rail traffic which identifies the total number and duration of each gate closure for current rail crossings, Interim Service, and Basic Service. Current and projected ridership data is supplied. However, parking demand projections are questionable at best. We suggest that license plate surveys of neighboring streets, interviews with adjacent merchants and with Framingham Police, and ridership surveys should be included."

Response

Section 18.2 of the 11/94 DEIR and Section 8.2 of the 3/96 FEIR presented the gate closure information. In summary, the institution of basic service commuter operations will result in 8 additional gate closings compared to the 47 closings that existed prior to the September 1994 Interim Service. The 47 included 31 MBTA, 6 Amtrak (now reduced to 2 operations) and 10 Conrail. Although Conrail operations can vary resulting in more or less gate closings and of different durations, the 2 Amtrak operations through Framingham may cease by the end of 1996. Commuter rail gate closings normally last for 60 to 90 seconds.

The MBTA understands the concerns about parking demand at the Framingham Station and elsewhere in the station locale. We have presented projections by the CTPS which show that the parking demand at Framingham will be reduced rather dramatically once commuter stations are operational in Ashland, Southborough, and Westborough. Plainly the situation bears monitoring.

Comment 16-2

"Although traffic data was collected for 1994 prior to the onset of interim service, no data is supplied for current conditions. This data would help to provide some confidence that future estimates of traffic and parking demand are reasonably accurate. Furthermore, the report clearly indicates that the excess parking demand currently experienced is difficult to quantify. Yet all long term parking facilities within vicinity of the Framingham Station are oversubscribed with lengthy waiting lists. Furthermore, we are aware that significant parking spill-over continues to be experienced throughout the area ever since interim service became effective. A thorough study of this condition is

likely to indicate that parking, in addition to what is planned for the south wye, may be needed in the future."

Response

We are aware that the ridership at Framingham Station has increased since the interim service began. We also acknowledge the fact that parking is severely constrained at this location. However, one major finding from our study is that once the intermediate stations between Worcester and Framingham are built, the parking situation at Framingham station will improve significantly. The addition of 95 spaces at South Wye will improve the condition even more.

Comment 16-3

"The introduction to Section 8.0, **Environmental Impacts - Framingham Station**, reveals that trains added with Interim Service '*...have proven to be extremely popular, with the Framingham boardings currently at 1,350 to 1,400 riders each weekday...*'. Data provided by the Metropolitan Area Planning Council taken in July of 1995, (presumably during the lowest ridership periods), report ridership as high as 1,688 indicating that Framingham had the second highest ridership figures on the system during that period. The fact that MAPC's ridership figures are significantly higher than boardings reported in the FEIR offers a reasoned argument that ridership projections, and the related traffic and parking demand figures, be revised upward."

Response

Ridership data gathered by the MBTA Audit personnel consistently indicate current daily boardings at Framingham Station is in the order of 1,400. An independent passenger survey conducted by CTPS in March 1996 also yielded similar results. We do not claim that MAPC's numbers are wrong. It is just that on some days, ridership could peak due to several reasons. Excessive delays on Mass Pike due to a traffic incident, special events or functions in the CBD, bad weather, unusual traffic problems in downtown etc., are some of the reasons why train ridership peaks on certain days. For the purposes of planning and engineering design, it is common practice to use typical average ridership numbers. Our data from various surveys consistently indicated that the base year ridership is in the order of 1,350 to 1,400 a day.

Comment 16-4

"The short-term mitigation measures proposed in Section 8.0 are in direct response to the concerns raised by the Town in earlier correspondence and are appreciated. The Town's Safety Committee, comprised of representatives from the Police, Engineering, Public Works and Planning Departments is presently reviewing the options presented and will provide its assessment and preference between Alternatives 1 and 2 in the immediate future. In view of the fact that these measures are intended to help offset the impacts of the Worcester Extension, we ask that they be considered for construction *simultaneously* with the reconstruction of the Framingham Station. In addition, we ask that the construction of the additional proposed parking in the south wye be constructed prior to, or in conjunction with, the Station reconstruction."

Response

The MBTA anticipates that the proposed Route 135/Route 126 intersection improvements will be done in the same time frame as improvements to the Framingham Station. The new commuter parking in the south wye will be performed by Conrail under a force account agreement. The timing for this work is being arranged.

Comment 16-5

"The Town is presently preparing final design plans for reconstruction of the intersection of Bishop and Waverly Streets. The MBTA's assistance in defraying costs associated with "rubberizing" the rail crossing at this intersection upgrade would be helpful to mitigate the impacts of gate closings associated with the additional rail traffic. In addition, a highway easement within MBTA's right-of-way to afford improved roadway alignment will be needed.

Response

See Response to Comment 10-11.

Comment 16-6

"Town staff has been working with the MBTA project team to integrate proposed improvements at the Framingham Station with a Streetscape improvement program presently under design within the downtown business district. We ask for continued cooperation in coordinating the design and schedule for improvements at the Station with this program. In particular, the Town seeks to develop clear pedestrian connections from the proposed new location of the station platforms to the downtown area. The existing platforms offer a visually clear and unimpeded path with immediate access to the public sidewalks which connect to the Downtown and various modes of transportation available there. The proposed station plans re-route passengers off this direct travel out onto Waverly Street. This creates a safety problem because Waverly Street is a busy arterial. In addition, the absence of a pedestrian connection will discourage activity in the commercial center of the Town. We ask that the station design provide continuous and direct pedestrian ways for west-bound and east-bound passengers to Concord Street which would measurably contribute to the vitality of the Downtown."

Response

The MBTA will continue to cooperate with Framingham Officials and to be as sensitive as possible to station-related issues which inter-relate with existing or proposed town programs.

Comment 16-7

"Tickets are currently sold only at a store on the south side of Waverly Street requiring riders seeking to purchase such tickets to cross this busy corridor. In an effort to offset potential pedestrian/vehicular conflicts, the probability of which will increase as ridership climbs, we suggest that consideration be given to offering ticket sales at a convenient location on the proposed or existing passenger platforms. The historic baggage building located immediately east of the existing south side platform would also be an excellent location for ticket sales. Furthermore, reuse of this small structure would also reclaim this historic building and provide a better environment for the station."

Response

See Response to Comment 10-15.

Comment 16-8

"The FEIR clearly states that parking demand presently exceeds supply. However, the FEIR also assumes that by year 2001 all stations between Worcester and Framingham will be constructed and operational, which gives rise to the prediction of a steep reduction in parking demand in Framingham. However, the FEIR indicates that average weekday boardings by 2001 will decline from current rates to 742. However, even at this rate the Town would continue to experience a deficit of approximately 53 parking spaces if the spaces in the north wye were constructed, as was envisioned in the Phase 2 plan for the Framingham Station. Resistance to the construction of new stations and the present increasing ridership are strong arguments that parking demand in Framingham will not diminish. Consequently, we ask that the MBTA assist the Town to obtain two easements from Conrail. The first to provide for a landscaped path across the North "wye," for access to existing parking in the Pearl Street municipal garage to promote this facility's use. This pedestrian pathway should be aligned with the proposed pedestrian overpass to be constructed in conjunction with the Station. A second easement is requested that would provide for a pedestrian connection to the Franklin Street extension to provide access to the MBTA parking lot. Finally, we ask that MBTA assist the Town to secure the rights from Conrail to construct parking in the north wye as was envisioned in Phase 2 of the Station plans."

Response

CTPS does project a decrease in Framingham riders to 742 by the year 2001. The existing parking available for commuters (see Section 8.3 of the March 1996 Final EIR) is as follows:

Framingham Town Garage	-	291 spaces
Waverly Street Lot	-	48
MBTA Lot	-	121
Hollis Court Lot	-	132
Waverly Street Lot (Proposed)	-	2
South Wye (Proposed)	-	95
Total	-	689 spaces

The deficit cited of 53 spaces is presumed to have resulted from 742 minus 689 equals 53. But of the 742 riders, the CTPS projections include 279 walkers, 45 kiss'n'ride and 419 park'n'ride. With the standard vehicle occupancy rate of 1.12, the 419 results in a demand for 374 parking spaces. Even if only 2/3 of the 689 spaces were available for commuters, the resulting 459 spaces will be more than adequate to satisfy the 374 demand.

Any use of the Conrail north wye would require purchase or lease of Conrail property; such an action is not part of the current MBTA plans. A connection from the MBTA parking lot to the Franklin Street extension is being addressed in the Framingham Station contract.

Comment Letter No. 17

Town of Westborough/Joan M. Bentley, Chairman - Board of Selectmen (5/16/96)

Comment 17-1

"At its meeting of May 14, 1996, the Westborough Board of Selectmen voted unanimously to support the Millbury Board of Selectmen's choice in siting the MBTA station proposed for your Town. The Westborough Board of Selectmen feels that the responsibility for this location should be heavily influenced by the local community where the siting is to take place."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment Letter No. 18

Town of Ashland, Dexter P. Blois, Town Manager (6/6/96)

Comment 18-1

"Vibrations: With additional trains traversing the corridor, the impact on the residents along the corridor will be significant. The report does not provide any mitigation measures for vibration."

Response

The FEIR provided analysis of alternative vibration mitigation measures, and determined none to practicable.

Comment 18-2

"Sound/Noise - According to the town's sources, additional trains will cause additional noise both from the trains themselves and from the whistles they blow at Ashland's two at-grade crossings. The report indicates that there are no residences within the 25 foot noise impact distance. (See table 5.2-2.) However, it fails to recognize that there are well over 100 elderly housing units immediately adjacent to the railroad right-of-way, many of which are no more than 50 feet from the edge of the right-of-way. And, while the impact may not affect any additional homes, the impact on the existing homes will increase significantly. No mitigation measures are stated."

Response

The noise analyses determined that project noise levels at these locations would not result in impacts requiring mitigation. While horn noise is recognized as an issue, it is a regulatory requirement.

Comment 18-3

"Traffic - Due to the increased frequency of the use of the corridor through Ashland, there will be increased closures of the two at-grade crossings which will negatively impact the traffic flow pattern through the center of town. No mitigation measures are indicated to resolve this problem.

Response

The DEIR discussed option's such as grade separation and the reasons why they are not feasible. The MBTA has met with Ashland officials to establish agreed-upon mitigation, as described in Section 7.12 of this FEIR.

Comment Letter No. 19

Town of Southborough/Charles E. Gaffney, Chairman-Planning Board (6/7/96)

Comment 19-1

"We continue to support the concept that all five immediate stations on the Worcester extension are inter-related. Just as we believe the Westborough-Southborough-Ashland

stations should go on line together to minimize impacts to any one community, Millbury and Grafton should be similarly linked.

Response

The Grafton Station is planned for mid-1997 (See Section 2.2 regarding elimination of Millbury Station). It is anticipated that the Westborough, Southborough, and Ashland Stations will go into service by the end of 1997, all within 60 to 90 days of each other.

Comment 19-2

"We support the concept of the Route 85 railroad bridge replacement which will allow for improved sight distance and a sidewalk linking the north and south sides of the tracks. However, the "recent decision by the MBTA" to eliminate the pedestrian overpass and route commuters via ramps and sidewalks under the Route 85 bridge is not endorsed by the Town at this time. We applaud the MBTA for being responsive to our concerns regarding the appearance of a pedestrian overpass, but we question the practicality of commuter circulation from one side to the other under the proposed plan. An underpass, as we understand is being proposed at the Weston station, still seems a reasonable solution at this location."

Response

The MBTA retains its existing policy to not construct pedestrian underpasses at commuter rail stations for reasons of safety, security, and liability. The "underpass" proposed at the Weston Station is proposed in an area where the railroad tracks are substantially higher than the adjacent grades, and pedestrians are able to walk from one side of the tracks to the other in full view. An overpass was preferred, however the overall structure height of 55-60 feet from grade to clearance over the railroad made it infeasible.

Comment 19-3

"We feel that a granite/stone finish to this bridge would be appropriate in this historic mill section of Southborough and would bring an end to further needed discussions on this subject."

Response

The Route 85 replacement railroad bridge will have cut granite block abutments in an effort to be sensitive to the historic aspect of the area.

Comment 19-4

"We are still somewhat unclear on noise and vibration impacts to residents and businesses in Southborough and reserve the right to comment in more detail on FEIR dealing with the Southborough station."

Response

The noise and vibration impacts of Basic Service railroad operations were presented in the DEIR, and updated for the first FEIR. The second FEIR re-evaluated these issues to address the effects of Basic Service to Millbury and Grafton only during the interim until Westborough, Southborough, and Ashland Stations are opened. All of these issues have been reviewed and approved by MEPA.

Noise and vibration effects related to Southborough Station are described in Section 6.3 of this FEIR.

Comment Letter No. 20

Town of Southborough/William J. Christensen, Chairman - Board of Selectmen (6/7/96)

Comment 20-1

"For example, the following complaints raised by some people at Millbury are common to ALL phase two stations: many out-of-town or "Regional" riders coming to local station, increased car traffic and congestion on surrounding roads, lack of visibility of parking lots or platforms from major roads (raising concerns over vandalism, drug dealing, etc.), noise impact from trains on nearby houses, etc. The point is that ALL local stations will have these problems. For example, in Southborough, only 25% of station ridership will be Southborough residents, and every one of the other problems at Millbury will also be experienced at our station. Therefore, the issue is not that these conditions exist, but that every reasonable effort is being made to mitigate them, and that the mitigation be consistent across all stations, in a regional solution."

Response

See Response to Commonly Raised Questions (re: Commuter Station Security) in Section 8.1 of this document.

Comment 20-2

"Accordingly, it is the policy of the Board of Selectmen of the town of Southborough, (and we believe of Ashland and Westborough as well), that approval by this board to a station located in this town will be contingent on there being stations built at ALL other sites proposed by MBTA (including both Grafton and Millbury). This is the only way to ensure that each town bears its "fair share" of the regional impact. If one station is dropped, then the other stations must pick up the overflow traffic and carry the load for the missing station, which would be fundamentally unfair."

Response

It has always been the plan to build all five proposed stations between Framingham and Worcester. Recently the Millbury Station has been eliminated from the program. The ridership will shift to the Worcester Station (11%) and the Grafton Station (89%). The Town of Grafton has accepted this scenario. No additional riders nor related traffic impacts will be shifted to Westborough, Southborough, or Ashland.

Comment 20-3

"The only justification for dropping a station would be if the environmental impact at that station was uniquely severe and therefore unacceptable from a regional perspective. We see no evidence of any unique impacts at the stations which have been studied in this report."

Response

Please refer to Response to Commonly Raised Questions in Section 8.1 of this document. Although the Secretary of EOEA did not suggest dropping the Millbury Station for environmental reasons, the MBTA (without a loss in ridership) opted to drop the Millbury Station from the current program due to local concerns.

Comment Letter No. 21

City of Boston, The Environmental Department (6/7/96)

Comment 21-1

"As the FEIR does not address corridor-wide noise and vibration levels and mitigation as we had requested in our March 8, 1995 letter on the Draft Environmental Impact Report (DEIR), we can only assume that this is a blanket policy for the entire line."

Response

The infeasibility of vibration mitigation was addressed previously in the DEIR and FEIRs. Basic service will increase daily operations between Framingham and South Station by a total of 8, all after 7:00 A.M. and before 11:00 P.M. The overall increase in L_{dn} values along the corridor east of Framingham would be less than 1 dBA.

Comment 21-2

"We note that with the proposed Basic Service, the earliest trains will pass through Boston neighborhoods before 7:00 am and the latest after 11:00 pm, both leaving and arriving at South Station. Residents will be sleeping at those times, many on floors above the first. In addition, the multi-unit dwellings that form the bulk of our urban housing stock will have complete living areas on each floor. How does this mitigation policy takes these issues into account?"

Response

An increase in the frequency of trains through Boston is an unavoidable yet minor impact of the project. Currently, abutting residents in various Boston neighborhoods experience early morning and late night noise impacts from trains to and from Framingham (and Worcester), Needham, Franklin and Providence. Implementation of Basic Service to Worcester will add only eight new trains (total inbound and outbound) to the Framingham schedule (prior to Interim Service which has already added four of those eight). All trains into or out of South Station on the Framingham line prior to 7:00 A.M. and after 11:00 P.M. are existing train operations. Basic service will only add trains between 7:00 A.M. and 11:00 P.M.

Comment 21-3

"On a related issue, we must once again object to the use of the Federal Transit Administration (FTA) standards for determining exposure to adverse noise impacts, and hence eligibility for mitigation, as unfair to highly developed urban areas. We believe that urban residents along the corridor will be unduly impacted and unable to obtain noise mitigation. We request that an absolute residential standard of 65 dBA L_{DN} be adopted. In addition, we request that a noise and vibration monitoring program be initiated corridor-wide to assess the effectiveness of the equipment and rail maintenance as mitigation measures and that several urban locations in Boston be chosen as monitoring sites."

Response

The FTA criteria do take ambient levels into account in determining impacts. Allowable increases are less in areas with higher existing levels. The Framingham line shares a common corridor in Boston with the Massachusetts Turnpike. The added 8 train operations in this corridor will have only a minor impact on L_{dn} noise levels.

Comment 21-4

"Despite the MBTA's response to the DEIR comments of the Boston Redevelopment Authority (BRA), we believe that this is an ideal time to examine use of Yawkey Station as a means to increase rail ridership, decrease automobile use and maximize the air quality benefits of this project. Rail passengers from the west who work in the Longwood Medical Area (LMA) and Fenway must bypass Yawkey Station and use another transit mode to return to that area from a point east. This extra transfer certainly decreases transit use and it seems likely that such a station can only help the Commonwealth meet Federal air quality standards. Planning for a direct connection to the proposed circumferential transit service in the Kenmore Square area will likewise assist in meeting the goals of the State Implementation Plan (SIP)."

Response

The MBTA now is participating in the study of the "Urban Ring" circumferential transit system and may implement one or more projects as a result. These future decisions and potential actions need not be resolved in order to move forward with the Worcester Commuter Rail Extension, which is itself required by the SIP.

Comment 21-5

"In closing, we again request that any increase in commuter rail trips between Framingham and Boston in excess of 32 workday trips require a Notice of Project Change."

Response

Prior to the start of Interim Service from Worcester in September 1994, the Framingham-Boston commuter schedule had a total 31 trains (inbound and outbound) on weekdays. Upon implementation of Interim Service, four (4) additional train operations were added between Framingham and Boston; when Basic Service is introduced, 4 more train operations will be added for a total of 39 total commuter operations between Framingham and Boston. The 32 trains cited in the comment refers to the Expanded Service schedule in the DEIR which is not proposed at this time.

Comment Letter No. 22

Keith K. Davison/West Roxbury, MA (6/7/96)

Comment 22-1

"The starting point for fair bus alternatives would be to consider the best bus service/system that might be provided for the same amount of money as will be spent on rail."

Response

The MBTA has analyzed bus alternatives to the proposed project and the Secretary of EOEA has agreed with the MBTA's conclusion that they would not, now or in the future, provide service equivalent in environmental benefits to the rail service.

Comment 22-2

"No recent material is provided for CAC meetings, proceedings or opinions."

Response

Most of the recent interaction with local communities, especially those who would host a commuter station, has been with the town rail committees and local officials. The CAC, for the most part, had an active role in the total project between Framingham and Worcester.

Comment 22-3

"Worcester airport is dying, despite continuous investment. Both Boston and central Massachusetts need there to be a Worcester airport that works, to relieve Logan and serve other parts of the state. Perhaps consideration should be given to relocating to the east side, conveniently accessible via commuter rail.

Response

This question goes beyond the scope of this project which was to reinstate commuter rail service between Boston and Worcester, not to solve problems at the Worcester Airport.

Comment 22-4

"The vegetation management plans presented do not represent a serious consideration of all potential alternatives for minimizing adverse environmental impacts. They are merely a rote justification/repetition of "business as usual" reliance on broadcast poisons.

Response

The Vegetation Management Plan (VMP) and the companion Yearly Operational Plan (YOP) are prepared, approved, and implemented under the Commonwealth of Massachusetts ROW Management Regulation 333 CMR 11.00.

Comment 22-5

"The Millbury Station locus map (fig. 3.1-1) suggests poor pedestrian access from the adjoining residential area."

Response

See Response to Commonly Raised Questions (re: Elimination of Millbury Station) in Section 8.1 of this document.

Comment 22-6

"No secure bicycle parking storage lockers are proposed; no comprehensive effort has been made to maximize this mode choice. In general, no effort has been made to maximize pedestrian access and usage of proposed stations. This may not conform with Section 61 requirements."

Response

Provision of bicycle racks at the commuter rail stations is a standard for new stations. Pedestrian access provisions have been incorporated at appropriate sites. For sidewalks proposed near stations as a form of mitigation, see the Draft or Final Section 61 Findings in Appendix C.

APPENDIX A

MEPA Certificate on November 1994DEIR	3-16-95
Notice of Project Change	5-12-95
MEPA Certificate on Notice of Project Change	6-22-95
MEPA Certificate on July 1995 FEIR	9-14-95
Notice of Project Change	10-31-95
MEPA Certificate on Notice of Project Change	1-10-96
MEPA Certificate on March 1996 FEIR	6-14-96
Citizens Advisory Committee (CAC) Comments on FEIR, January 28, 1997	
Responses to CAC January 1997 Comments	

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
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March 16, 1995

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	: Worcester Commuter Rail Extension Project
PROJECT LOCATION	: Statewide
EOEA NUMBER	: 9154
PROJECT PROPONENT	: Massachusetts Bay Transportation Authority
DATE NOTICED IN MONITOR	: December 7, 1994

The Secretary of Environmental Affairs herein issues a statement that the Draft Environmental Impact Report submitted on the above project adequately and properly complies with the Massachusetts Environmental Policy Act (G. L. c. 30, s. 61-62H) and with its implementing regulations (301 CMR 11.00).

Overview

The Draft Environmental Impact Report (DEIR) has evaluated the environmental impacts and issues relating to the proposed initiation of commuter rail service along an existing 23 mile rail corridor between the Framingham commuter rail line and the City of Worcester. The service will use the Conrail track which passes through Worcester, Millbury, Grafton, Westborough, Southborough, Ashland, and Framingham. A second track will be re-laid along 11 miles of existing roadbed from Westborough to Worcester. An interim service along this route was reinstated to Worcester in the fall of 1994, and was recently reported to be very successful in attracting ridership. Full service is scheduled to be operational by December 31, 1996, as required by the air quality regulations of the Department of Environmental Protection (DEP).

The DEIR was pre-reviewed by the Citizens Advisory Committee (CAC) and comments from the CAC were included in the DEIR. Generally, these comments appear to be comprehensive, accurate, and fair. They should receive full consideration in the FEIR. Citizens in the municipalities affected by the project have shown

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a high level of interest in this project, as well; their comments are referenced in this Certificate and listed below. Sensitivity to these concerns should be demonstrated in revisions and refinements to the project design and siting, in the operational plans, and in the commitments to the environmental mitigation proposed in the FEIR.

Subsequent to this DEIR review, the MBTA will be considering the appropriateness of bringing forward certain elements of the project sooner than others. This could be handled in separate FEIR reviews. Information gathered during the DEIR review gives some preliminary indication of the advantages and disadvantages of such a plan. The City of Worcester, Office of Planning and Community Development comment, for example, has identified a need to complete the permanent layover facility as soon as possible because of the neighborhood complaints regarding noise and diesel fumes at the temporary layover site in the Providence and Worcester rail yard.

The Special Procedure established for this project would enable separate review of project components. However, this would need to be accomplished so as to avoid any inadvertent shift or increase in environmental impacts. As an example, the CAC comment raises the concern that there may be unexpected impacts associated with the advancement of individual stations out of phase with the others. The Committee recommended that the FEIR cover at least the Ashland, Southborough, and Westborough stations.

Another advantage of two separate and sequential FEIRs would be that the second FEIR could provide an additional opportunity to answer any outstanding issues raised during the review of the first FEIR. This would help to ensure that significant and controversial issues would be addressed to the greatest extent.[1] A proposal to prepare separate FEIRs should be filed as a Notice of Project Change with a recommendation for the topics to be considered in each document. This approach will provide additional opportunity for public comment.

The remainder of the Certificate will highlight important issues to complement and reinforce key concerns raised in the CAC comment and those listed at the close of the Certificate.

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[1] This could also give the Town of Ashland an opportunity to review and comment on station plans received late in the DEIR public review period.

Revenue Issues

Commenters have raised the issue of the MBTA's capability to finance this project while maintaining existing services and funding service expansions already approved, a concern driven by increases in project cost and reductions in the MBTA operating budget. Although a financial feasibility analysis reference in the DEIR (p. 3-48) concluded that the Old Colony project, major capital improvements including the Newburyport extension, and the reinstatement of the Worcester commuter line were within the overall financial capability of the MBTA, no supporting information was provided.

This is an important matter that warrants more discussion in the FEIR. As suggested in the comments, in a worst case situation the MBTA could be put in a position of having to make tough choices such as increasing fares, increasing assessments, reducing services, and deferring or eliminating mitigation in order to maintain and expand the transportation system. Should this occur, then the ridership gains of this project might be off-set by losses in ridership elsewhere in the system. The net effect could be increased vehicle miles of travel (VMT) and higher levels of air pollutants. The FEIR should provide sufficient information to demonstrate that the MBTA will be able to operate this project without adversely affecting its services elsewhere.

Commenters have also expressed concern about financial assessments which are imposed on communities within, and not those outside, the district, even though citizens in non-member communities will use the service. While I appreciate such concerns, I find they are not within the scope of MEPA review. In general, MBTA's financial systems and decision-making are mnot subject to this review, except to the extent they have implications for the environmental impacts of proposed projects.

Alternatives

Alternative Transportation Modes

The analysis of alternative transportation service options is a comparative summary of the Worcester Extension project with the No Build and Express Bus Service options. The analysis concludes that bus service cannot attain the level of ridership achievable by commuter rail. However, bus service is less expensive; operation and maintenance costs have been estimated to

be $1.53 million ($1.96 per passenger), compared with $5.08 million ($4.33 per passenger) for the Worcester Extension Service. According to the DEIR, environmental impacts appear to be somewhat less extensive with busing due to the fact that station facilities would be limited to parking. However, the impacts of the alternatives have not been quantified for comparative purposes and the information provided in this section of the DEIR allows only limited understanding of this matter.

The ridership projections for commuter rail and bus services were estimated based on census and other data for the cities and towns in the transportation system capture areas. Certain assumptions were also made about transportation networks and mode choice factors (p. 4-4) to arrive at the ridership estimates. Were these same assumptions used in the ridership study in Section 5? What mode choice factors were used for rail and bus services and how were those factors used in the analysis? What is the degree of accuracy of the ridership projections, given that 1980 census data were used? The inclusion of this information with the DEIR ridership study in Appendix II, Section 2 would have been appropriate.

A comparative analysis of vehicle miles of travel (VMT) and air emissions between Build and No Build conditions was based on the 1994 ridership projections (Section 5.5).[2] This analysis was done to show the regional air quality benefit of the Worcester Extension project. It was estimated that regional VMT will be reduced by 118,000 in 1996. This corresponds to a net VOC reduction of 113 kilograms per day (kg/day), a reduction of NOx by 199 kg/day and a CO reduction of 1584 kg/day. Because speeds on the Mass Pike are expected to increase to some extent, emissions reductions have been estimated to be greater than the effects of the commuter rail extension project.

Section 4 of the DEIR concludes with a comment that the Worcester Extension project is required by the Department of Environmental Protection (DEP), air quality regulations (310 CMR 7.36 (2) (c)2), unless substitution of an alternative becomes necessary because the engineering, environmental impacts, or economic impacts cause the project to be infeasible. Although it appears to be unintended, the limited text leads to the question the CAC has raised. Is this significant state transportation

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[2] The assumptions in this analysis have been discussed to a greater degree than the ridership projections used in the comparison between mode choices.

project justified primarily because it has been found to be "not infeasible?" A more thoughtful response (which may take note of recently published ridership data) is needed in the FEIR.

Regional Station Alternative

The DEIR provides enough information about potential regional station site alternatives to demonstrate that regional station siting for the commuter rail extension will be significantly more complicated and difficult than intermediate station layout and design, due in large part to environmental impacts and costs. In addition, the DEIR indicates that neither the ridership demand for a regional station nor the negative effects of the intermediate station plan are so compelling that a regional station must be advanced immediately and in spite of the environmental impacts and costs associated with it.

Commenters from the Town of Westborough have expressed an interest in the substitution of a regional station because of the impacts predicted at the Westborough station site. Concerns have been raised in other communities as well that an intermediate station could become, de facto, a regional station. Finally, the CAC and others have advocated strongly that a feasibility study of an I-495 regional station be undertaken before decisions are made on the intermediate stations.

I find that the DEIR has been responsive to the scoping certificate on this issue. I also note that the MBTA will be conducting a report to the Legislature on this issue in the near future, as directed by the recently passed Transportation Bond Bill. I request that the MBTA carefully consider the concerns and arguments raised during this review. I also request that the report to the Legislature be made available for public comment (through a notice in the Environmental Monitor) and that the (next) FEIR report on the results. I leave it to the judgment of the MBTA, however, to decide whether those results warrant a change in the intermediate station analysis, to be presented in the FEIR.

Ridership Projections

The DEIR has explained that four station build out scenarios were used as the basis for modelling ridership. However, the results, in Tables 5.3-1 and -2, and the discussion consider only two alternatives (Alternate 3 and 4), which shows the predicted range of ridership at the intermediate stations for 1996. It is

unclear why the results for Alternate 1 and 2 were not also presented here to understand the effects of unconstrained parking and the inclusion of a regional station on ridership. This information should be included in the FEIR.

The interim service has been operating for several months and ridership has presumably stabilized. The FEIR should evaluate the accuracy of the ridership projections for Worcester based on actual ridership data. If possible, the conclusions drawn from this assessment should be extrapolated to the intermediate station ridership projections to verify that the programmatic design for those stations is sound.

The impact that the interim service has had on other HOV modes, in particular bus service, should be assessed in the FEIR, as per the CAC comment.

Regional Traffic

The DEIR has predicted "at least modest reductions" in traffic volumes on Route 9 and the Massachusetts Turnpike, while access routes to the stations will experience increased traffic during peak hours of travel. The most significant traffic reduction in 1996 is expected on the Mass Pike between Route 128 and Boston (1400 fewer vehicles in the AM peak).

Layover Facilities

The layover facility will consist of new railroad tracks for four, 9-car train sets, internal access driveways, an electrical substation, a 30 foot by 50 foot maintenance building, fencing, lighting, fire hydrants and an employee parking lot. Nighttime storage and train end runs will occur in the layover facility. The site selection process considered certain criteria, primarily size and location near the last station on the line, in order to identify a preferred location. According to the DEIR, none of the 13 potential sites met all the criteria. The preferred alternative (site 8), at the Conrail Yard, MP 43.5 in Worcester, is in a predominantly industrial area.

The City of Worcester, Office of Planning and Community Development and Preservation Worcester prefer the proposed location because it accommodates four tracks, is adjacent to the Amtrak station, is within a mile of Union Station, the area is industrial, and the location provides parking and facilities for

personnel. As suggested by the City, it may also be possible to realign the site to provide a double-ended facility after permanent service is initiated from Union Station.

Because of expected noise, vibration, odor, and air quality impacts, layover facility siting avoids residential areas, wherever possible. However, there is an elderly housing complex, the Mt. Carmel Apartments, located on the north side of Shrewsbury Street, within 300 feet of the centerline of the layover facility. The DEIR predicted that these apartments may be exposed to an Ldn of 70 dBA under worst case conditions. However, no noise mitigation is planned, because the report indicates that mitigation is only necessary when noise impacts reach or exceed 74 dBA Ldn. This conclusion should be explained in terms of ambient noise levels, the applicable noise impact criteria used to draw this conclusion, and the location where the noise impact was measured.

Reducing train idling time is an effective way to limit locomotive noise impacts. The MBTA has minimal ability, however, to control idling in cold weather. Consequently, this mitigation measure would be unreliable. Electric power sources provide an alternative way to control idling noise. However, the report provides no assurances that this alternative source of power will be used for this purpose. Additional discussion of this issue should be provided in the FEIR to better understand existing applications, the potential effectiveness in controlling auxiliary engine noise, and the degree of noise attenuation that could be achieved at sensitive receptors, such as the elderly housing complex.

The results of the pure tone analysis indicate that the DEP guideline, i.e. the peak exceeds each adjacent octave band sound pressure level by more than 3 dB, will be exceeded for the older 1000-series locomotives. The MBTA is purchasing new locomotives, i.e. 1050 series, which will not have as great an impact, but the phase out of the older locomotives is unspecified. Therefore, the FEIR should consider the frequency of use of the noisier locomotives at initiation of service and long-term to more accurately forecast pure-tone exceedances. The FEIR should consider the feasibility of operating only newer train sets.

The site plan of the layover facility, Figure 9.0-1, also shows that the site is being used as an interim station with platforms, a passenger drop-off area, and a 177 parking space lot. The FEIR should explain what will happen to the station facilities after Union Station is developed. As requested by the

City of Worcester, Office of Planning and Community Development, the FEIR should include any plans for future remodelling of the layover facility after Union Station is complete. The FEIR should also specify the noise mitigation measures that will be undertaken during construction of the layover facility. Those described in the DEIR (p. 9-10) seem appropriate, but no commitments have been made.

Rail Line Impacts

As a result of the addition of a double track along a 7 mile segment from Westborough to Worcester, there will probably be additional drainage, wetlands, wildlife, and archaeological resource impacts. The rail embankment widening and fencing will cause impacts too. However, the DEIR indicates that the areas of new disturbances will not be identified until final design. This raises the concern that the public review may not disclose the extent of the project-related impacts to the natural environment because the FEIR is due at about the 60 percent design stage. To the extent possible, these impacts should be described fully in the FEIR and the report should demonstrate that an effort was made to avoid and minimize damage to resource areas. As noted previously, submission of a separate FEIR for issues relating to the rail line and layover facilities will be considered in a NPC after completion of the DEIR review.

The same level of impact analysis should be provided for the inadequate bridges which will be reconfigured, (the Pine Street Bridge in Grafton, and the Route 85 bridge in Southborough). I note that the CAC and the MAPC have raised a variety of questions relating to bridge reconstruction and lowering of the rail line for double-stacked trains that should be addressed in the FEIR. There are also three grade crossings between Framingham and Worcester that will be affected by the additional train operations. Impacts associated with the increased rail service should be explained in the FEIR.

The implementation of the commuter service (20 trains per day) has been predicted to have a noise impact on 6 residences in Grafton, and the expanded service (32 trains per day or 12 additional trains) is expected to impact 92 residences along the corridor (Table 7.3-2), due to increased train speeds as well as an increase in the number of trains. The DEIR has recommended noise barriers, because of the potential effectiveness, and ballast mats to control vibration. At the same time, the DEIR indicates that two percent of the construction costs can be used

for mitigation. Will there be sufficient funding to mitigate the noise and vibration impacts to the desired levels? Have the barriers been found to be cost effective and therefore implementable? In areas that do not appear to meet the cost effective criterion, will noise attenuation measures be proposed for the buildings directly, or will other measures be proposed?

Commenters have raised a concern that 31 trains will be running as late as 1:20 AM (p. 3-45). The FEIR report should be particularly sensitive to nighttime noise impacts and consider ways to control those late night and early morning operations. The FEIR should also respond to concerns expressed by the City of Boston with noise impacts in the Framingham-Boston corridor, and concerns that the noise standards used do not take into account background noise and cumulative impacts.

The DEIR includes an inventory of the expected train vibration impact (Table 7.3-4) to 41 residences. After reviewing the vibration mitigation options, the DEIR concludes that about 4650 feet of ballast mats would be needed to reduce the impact entirely. The report concludes that it may not be cost effective to protect only a few houses, however. Moreover, mats may not be as effective in areas where the vibration is due to low frequency components. The FEIR should clarify the vibration mitigation plan based on further assessment of the areas of impact.

Archaeology and Historical Impacts

Although the main text is quite abbreviated, Appendix I in DEIR is sufficiently complete to understand the work undertaken to identify and remediate archaeological and historical impacts. The results of background research, an architectural windshield survey, an archaeological walkover survey, and predictive modelling to identify the archaeological sensitivity of the sites impacted by the project.

Areas of potential disturbance, with the exception of the bridge work, will not be known until final design, and so the extent of the potential impacts is unclear. The recommended station sites generally are considered potentially significant for archaeological resources; all interim station locations, including Millbury station sites (Route 122, and Route 20), Grafton, Westborough, Southborough, and Ashland are identified for further study.

The DEIR has also recommended a complete architectural survey; however, the recommendations for the work on historical bridge structures remain unclear. This should be addressed in the FEIR. I concur with the suggestions of the Massachusetts Historical Commission (MHC) as to how and when to proceed with surveys and more advanced investigations, and what information should beprovided in the FEIR.

Drainage

The FEIR should provide more detailed information about the required culvert repair work and any new drainage outlets which will result in wetlands impacts. Commitments to the maintenance of the storm drainage system should also be made in the FEIR. What specific measures are needed for the oil drip pans and separators, such as those described for the layover facility (p. 9-11)? Although the description of the systems appears to suggest that these may not be the typical oil separators, the degree of effectiveness has not been predicted.

Station by Station Comments

The following discussion of station impacts is a summary of some of the salient points raised in the comments listed below. I note that comments like those submitted on behalf of the Town of Westborough cannot be easily summarized; as provided in the MEPA regulations, those comments nonetheless require a response in the FEIR. In addition, the Draft Section 61 Finding in the FEIR should itemize the proposed mitigation measures by station location.

Many favorable comments were received for the Southborough station proposal. The Westborough station site appears to be the most controversial, based on the number of issues raised. Many comments advocated for the development of a more regional station, in order to eliminate the localized impacts on some municipalities, particularly the impacts in the Towns of Westborough and Southborough.

The CAC and several commenters have concerns that traffic will be diverted and impacts worsened if adjacent stations are not developed within the same timeframe. This issue needs to be considered in the FEIR.

Agricultural impacts may result indirectly from growth that is induced by expanded commuter rail service. As requested in the comment from the Department of Food and Agriculture, mitigation off-sets for indirect farmland impacts should be considered in the FEIR. According to that agency, several commuter rail stations have the potential to provide marketing opportunities for local farmers.

Bicycle and pedestrian accessibility to and from the proposed stations is an important issue; amenities such as sidewalks, bike paths, lockers, and good travel routes to the station need attention in the FEIR.

Ashland - The CAC comment raises important issues concerning platform alignments and parking availability that need further evaluation.

It appears that the south parking lot access at Route 135 will have a significant impact. The Town of Ashland has recommended widening for designated turn lanes and signalization for safety. This should be evaluated in the FEIR. There are also concerns with the intersections in Ashland that are at levels of service (LOS) D/F. Mitigation measures for these locations should also be considered.

The MetroWest comment supports the east alternative, chosen by Ashland Selectmen because it has the potential to improve the waste site cleanup area, opens areas for commercial and industrial development, has minimal wetland impact, and avoids a grade crossing for some commuters.

There is also comment in support of the Ashland west alternative which indicates that the traffic and noise impacts would be lower and that at grade crossings would be shorter in length. Furthermore, the west alternative avoids potential delays with the Nyanza waste site cleanup. This alternative has the potential for localized business impacts, according to the comment from Daniel Giargiari, which should be addressed in response to the concerns raised.

Millbury - The CAC comment questions some traffic assumptions and results that should be reconsidered in the FEIR. In addition, a drainage system maintenance plan and commitments to fulfill the requirements of the plan need to be clarified in the FEIR.

More traffic mitigation may be needed at Route 122/20, according to commenters, and land taking is a concern. The access road from Route 20 could be developed so as to encourage economic development.

Bicycling and pedestrian access options should be pursued, and a commenter notes that the Route 122 station location is preferable because it is accessible to pedestrians and by bicycle.

Southborough - Commenters indicate that the pedestrian overpass is aesthetically out of character with the neighborhood. As an alternative, reactivation of the existing underpass has been proposed. The compatibility of the station design in the rural business district needs to be shown in the FEIR.

Some have solicited a commitment that a garage will not be built at the proposed Southborough Station and the reservation of 90 spaces on north side for residents only is controversial.

As expected, there are traffic concerns and impacts on the residential character of the area. Closure of the median on Route 9 at Woodland Road has been reported to be held up because of the EIR review for the commuter rail project. It is not clear why this is so. Furthermore, the CAC comment recommends that the proposed signal timing changes at Route 85/Southville Road be reviewed because this measure may not be sufficient to mitigate the traffic impacts.

Westborough - Historical properties have been overlooked according to the comment from the Westborough Historical Commission. Furthermore, archaeological survey data has not yet been provided to the Town or the Massachusetts Historical Commission.

Neighbors have raised concerns about noise impacts on homes and the neighborhood that deserve attention in the FEIR.

There are also concerns with the safety of children who walk on Fisher Street during commuter rush hours. Sidewalks are in poor condition or non-existent; however, according to the CAC, plans for sidewalks are being developed.

Traffic volumes on Milk to Maynard Streets should be higher than indicated in the DEIR, and volumes on Fisher Street appear to be too low also. The traffic assumptions have been questioned

by the CAC, the Town of Westborough municipal agencies and the MBTA Advisory Committee. Background growth does not appear to have been fully accounted for in the study and commuter route distribution has been questioned.

The roadway improvements at the Route 9/Otis Street intersection may not make this the preferred route to the station. A route from Milk Street to Fisher Street, and then to Smith Valve would be more direct, based on comments. Safety issues at the key intersections have not been addressed to the satisfaction of commenters. Streets such as Arch Street are narrow and rural in character. However, these local streets have been impacted to a great degree by the development on Route 9 near Otis Street. These traffic and safety concerns warrant thoughtful consideration in the FEIR.

Grafton - A commenter sees an economic development potential being created in Central Massachusetts by the Grafton Station siting. A reverse commuting pattern could be established because of the linkage opportunity for biotech parks along the rail corridor. The traffic analysis should reconsider station traffic to Green Street in Shrewsbury.

Wellesley - The Town has raised a concern that no impact assessment of the 3 stations in Wellesley has been provided in the DEIR. The Town has specific safety concerns.

Boston - A comment has observed that the DEIR did not provide a study of the potential for a new station at Kenmore Square (Yawkey Way) and its connection to the urban ring. The City of Boston has pointed out that additional information is needed to address pedestrian and platform issues at South Station.

Newton - The Department of Planning and Development has raised the concern that the basic and full build service may cause significant scheduling disruptions on existing services. This may be particularly so at the three stations in Newton because this is a single track service.

March 16, 1995
DATE

Trudy Coxe
Trudy Coxe

Comments received:

10/4/94	Russell Fustino
11/22/94	Office of Selectmen and Town Manager, Town of Ashland
1/6/95	Board of Selectmen, Town of Wellesley
1/6/95 3/8/95	John Woodward
1/8/95	Anne M. Huff
1/10/95	Westborough Historical Commission
1/22/95	Bicycle Coalition of Massachusetts
2/1/95	Brennan F. Wall
2/2/95	Judith and Thomas Little
2/2/95	Andrew and Teresa Boyce
2/5/95	Massachusetts Restaurant Association
2/8/95	Jane Fedorowicz and Michael Golibersuch
2/8/95	William Murphy
2/8/95	Claudia J. Lefter
2/12/95	Scott Rossiter
2/14/95	Joseph Harrington
2/14/95	Patricia C. Pirozzi
2/14/95	James M. Waddell
2/16/95	Medical Academic and Scientific Community Organization, Inc.
2/17/95	Helen and Bill Panas
2/17/95	Brennan F. Wall
2/21/95	Mrs. Paul A. Smith
2/22/95	Elizabeth Colbert
2/23/95	James P. Knowles
2/23/95	Peter Venuto
2/20/95	Joseph P. Orlando
2/20/95	Mary Cullen
2/24/95	City of Worcester, Office of Planning and Community Development
2/24/95	Mary Fisher and Family
2/24/95	Tufts University, School of Veterinary Medicine
2/24/95	Stephen and Charlene Henry
2/26/95	Susan B. Stager
2/27/95	Preservation Worcester
2/27/95	Police Department, Westborough
2/28/95	Ellen L. Giargiari
2/28/95	MAPC
3/3/95	Keith K. Davison
3/4/95	Jane and Richard Dunphy
3/3/95	Burnham's Supper House
3/3/95	Mario Avelloni
3/5/95	Richard E. Fournier, Jr.
3/5/95	Robert L. and Barbara R. M. Brais

3/5/95	Sally Tajiani
3/5/95	Alan Pl and Janice R. Silvestry
3/6/95	Town of Westborough (Selectmen, MBTA Advisory Committee, Planning Board, Police Dept., Public School Committee, Joyce Coll, Lou and Maureen Jankauskas, Ellen Gugel, Barbara Reismann, Barbara Sullivan (and others already cited previously)
3/6/95	Bill and Mary Anne Coveney
3/6/95	E. Thomas and Judith McCabe, et. al
3/6/95	Dorothea E. MacLeod
3/6/95	Jackie Adams
3/6/95	Department of Food and Agriculture
3/6/95	Rosemary Johnson
3/6/95	Town of Ashland, Office of Selectmen
3/6/95	Senator Robert A. Durand
3/6/95	Town of Grafton, Board of Selectmen
3/6/95	Nelson Holden
3/7/95	Marvin S. Silver
3/7/95	MetroWest
3/7/95	Brian and Antoinette Kennedy
3/7/95	Larry Gomes
3/7/95	Department of Planning and Development, City of Newton
3/7/95	Cheryl and Paul Crivello
3/7/95	Town of Framingham, Planning Department
3/7/95	Town of Southborough, Board of Selectmen
3/7/95	Jennifer M. Speed
3/7/95	Diane M. Power
3/7/95	Rep. Harriette L. Chandler
3/8/95	Jacqueline and David Cox
3/8/95	City of Boston, The Environment Department
3/8/95	BRA
3/8/95	People for Ashland West Alternative, John J. Kelly et. al
3/8/95	Massachusetts Audubon Society
3/9/95	Mary Richards, DEP/CERO
3/9/95	Stephen Kerlin, Town of Ashland
3/9/95	Town of Hopkinton, Office of Selectmen
3/9/95	MHC
3/9/95	Senator Matthew J. Amorello
3/8/95,3/9/95	Union Station Alliance
3/9/95	Andrew B. O'Donnell
3/9/95	Ashland MBTA Rail Committee
3/9/95	Massachusetts Biotechnology Research Park
3/9/95	Central Massachusetts Regional Planning Commission

Late comments:

3/10/95	Dorothy McMahon
3/10/95	Julia McTigue Jacobs
3/10/95	Bruce R. Johnson
3/14/95	Thomas R. Hoover, Worcester City Manger

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Massachusetts Bay Transportation Authority

William F. Weld, Governor | Argeo Paul Cellucci, Lieutenant Governor | James J. Kerasiotes, Secretary and MBTA Chairman | Robert L. Mabardy, Interim General Manager

May 12, 1995

The Honorable Trudy Coxe, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02202

Attention: MEPA Unit

Re: Worcester Commuter Rail Extension - EOEA #9154
Notice of Project Change to Prepare Two Separate
Final Environmental Impact Reports (EIRs)

Dear Secretary Coxe:

The Massachusetts Bay Transportation Authority (MBTA) Draft Environmental Impact Report to extend commuter rail service to Worcester was found by you to comply with the Massachusetts Environmental Policy Act and with its implementing regulations on March 16, 1995. The Worcester Rail review is being carried out as a Major and Complicated Project under the control of a Special Procedure. Under the provisions of the Special Procedure, the MBTA is allowed certain discretion in filing multiple Final EIRs for the project. In your recent Certificate, as in the October 8, 1992 Certificate establishing the Special Procedure, you point out the advantages of filing separate and sequential Final EIRs for the project.

Accordingly, we seek by this letter your permission to prepare and file two separate Final EIRs for this project. Under the provisions of the Certificate of the Secretary of Environmental Affairs on the Notice of Project Change dated January 14, 1994, the MBTA initiated interim service to Worcester in September, 1994. While the interim service has been successful in attracting ridership, relatively complicated dispatching has been required along the single track section of the line. It also has been necessary to utilize, on a temporary basis, layover facilities in a Providence and Worcester Railroad Yard in Worcester. Use of this area has resulted in complaints from abutters. To expedite transfer to the permanent layover facility and to simplify dispatching operations, the MBTA proposes to prepare a first Final EIR immediately for the track and other rail corridor improvements and the layover facility.

There remain, however, unresolved questions pertaining to final determination of immediate station locations in the communities between Worcester and Framingham that make preparation of a Final EIR for those elements impractical within the same timeframe as the track improvement/layover facility EIR. The MBTA proposes to treat these matters in a second Final EIR.

The approach just outlined will not cause any inadvertent shift or increase in environmental impacts. Each of the proposed Final EIRs will provide an introductory description of the project as a whole so that context can be maintained. In addition, we suggest below the particular topics to be considered in each document. We hope that you agree with us that this approach will provide for the greatest environmental benefit and offer the greatest opportunity for informed public comment.

PROPOSED TRACK AND LAYOVER FINAL EIR

The first Final EIR is intended to deal with the questions surrounding the permanent layover facility in Worcester and the construction of the rail and signal improvements needed for two-track operation of the line between Framingham and Worcester.

Track/Corridor Improvements

The Draft EIR discussed proposed improvements to the rail corridor necessary to accommodate the combined use by MBTA commuter rail trains, Amtrak passenger service, and Conrail freight. While the major focus of the track bed improvements consists of restoration of a 7-mile section of double track between Westborough and Worcester, an additional 3-mile section of existing track in Worcester must be upgraded for use as a mainline track. Geometric improvements to the remainder of the corridor, to allow for increased speed limits, and measures to increase overhead clearances at several bridges also were discussed. Operational and safety issues such as signal and communication system upgrades and fencing also were described.

Very few of the comments received on the Draft EIR concerned these aspects of the project. Subsequent to circulation of the Draft EIR, as design progressed on corridor improvements, it was determined that an additional 1.5 miles of storage track is necessary immediately west of Union Station in Worcester to replace storage track being upgraded for mainline use east of Union Station. Construction of this storage track in an urban setting is not expected to involve work outside the right-of-way, nor to lead to adverse environmental effects. The MBTA plans to include a discussion of the effects of this additional work within the scope of the Final EIR for the Track and Layover Facility. The reconstruction of the Route 85 railroad bridge in Southborough will be included also.

Layover Facility

The Draft EIR presented a thorough discussion of the layover site selection process and evaluation criteria resulting in the choice of a preferred site. The Draft EIR also presented an overview of the facility layout, including new trackage, access driveways, electrical substation, maintenance building, and site drainage. Potential impacts of the layover facility operations were addressed, including traffic, air quality, noise and vibration, drainage and hazardous materials, and possible short-term impacts from construction. Mitigation options were set forth where appropriate.

Comments received on the Draft EIR expressed concerns regarding noise and vibration, the possibility of additional track alignment alterations after renovation of Union Station is completed, access and parking questions, and mitigation matters.

The Final EIR will carry forward the Draft EIR discussions of the track and corridor improvements and the layover facility, report on any changes in design or anticipated effect since the Draft EIR was reviewed, and set forth the MBTA's proposed mitigation of any unavoidable impacts.

Response to Comments

The response to comments section of the Track and Layover Final EIR will address each comment raised about these matters in the Draft EIR Certificate, in the CAC's Draft EIR comments, and in the additional comments submitted.

PROPOSED RAIL OPERATIONS/STATION CONSTRUCTION EIR

The second Final EIR is intended to address all remaining questions other than those dealt with in the Track and Layover Final EIR. The key areas are the projections of ridership for basic service, the noise and vibration effects of rail operations, and station siting and construction questions.

Rail Operations

The primary focus of this section of the second Final EIR will be on the elements of, and potential impacts from, the implementation of the basic service commuter train schedule presented in the Draft EIR. The impact from noise and vibration will be further assessed and, where appropriate, mitigation will be proposed. The MBTA will provide a further discussion of its financial capability to operate this service without adversely affecting its services elsewhere. Additional light will be shed on existing transportation networks and mode choice factors. The MBTA has had the opportunity to assess the impact of interim service on other HOV modes and will present these data along with any needed additional evaluation of ridership projections in the Final EIR.

Station Construction

The MBTA is continuing to work with CAC and representatives of the five communities in which intermediate stations are proposed to finalize site selection. The Draft EIR presented impact analyses for fixed station locations (in Grafton, Westborough, and Southborough) and for stations which have alternative sites (in Millbury and Ashland). With the filing of this Final EIR, a firm presentation will be made on the number and location of stations to be built and specific details of each station will be provided. The Final EIR will include a station by station discussion of potential environmental impacts and proposed mitigation. Potential archaeological, historical and agricultural impacts also will be examined. A timeframe and sequencing for station construction will be presented, having as its goal a smooth transition from interim to basic service. Concerns have been expressed in Draft EIR comments that traffic patterns could be adversely affected if adjacent stations are not developed in the same timeframe. Traffic patterns will be addressed by the MBTA in the Final EIR on a station by station basis.

Regional Station Analysis

The Legislature directed the MBTA to complete a report on a regional station as part of the recently passed Transportation Bond Bill. To respond to this requirement, the MBTA will engage an independent consultant to assess the potential for, costs of, and benefits of a regional station in the vicinity of Route 9 and I-495. The operations/stations Final EIR will summarize the results of this report. The MBTA will, as it has in the past, carefully consider the concerns and arguments raised about a regional station during this and other reviews and will discuss the ongoing regional station analysis with the CAC.

Response to Comments

For this second Final EIR, a response to comments section will address comments, other than those on track and layover matters, raised in the Draft EIR Certificate, in the CAC's Draft EIR comments, and in additional comments submitted. Here, however, given the bulk of comments and the similar subject matter of many of them, the MBTA proposes to prepare a consolidated "Response to Commonly Raised Questions" as a part of the response to comments chapter. If this is acceptable, most comments can be dealt with effectively and without repetition. We also propose to use an index table to direct commenters to responses in the body of the text and to respond directly to singular comments that are not dealt with in the response to commonly raised questions or elsewhere in the text.

PROCEDURAL MATTERS

The lapse of time since the drafting of the original Special Procedure, the experience gained by the MBTA in the review to date, the sheer bulk of the comments on the Draft EIR, and the fall off in attendance at Citizens' Advisory Committee meetings, together lead the MBTA to request three procedural changes. We propose to: broaden and revivify the CAC; circulate the comments on the Draft EIR once instead of twice; and provide a review period appropriate to the scale of each of the two proposed Final EIRs.

Citizens' Advisory Committee (CAC)

Comments from Hopkinton and from Framingham have requested that each be granted a seat on the CAC. The MBTA has no objections to this request and asks that the Secretary consider inviting each community to designate a representative. Simultaneously, the other communities on the CAC might be asked to confirm their designee or make a new designation so that those members who either have lost interest or no longer have the time to participate may be replaced by more active community representatives.

Distribution of Draft EIR Comments

Given the bulk of the commentary received on the Draft EIR--some 500 pages--the MBTA seeks your permission to distribute the entirety of the comments one time, with the Final EIR on Operations and Stations, to all commenters and interested parties on the circulation list. The comments on the track work and the layover facility are sufficiently few that they can be abstracted and quoted directly in the Response to Comments section of the Track and Layover Final EIR. These responses then can be incorporated into the index table that will accompany the Operations and Stations Final EIR so that a complete response to comments can be had in one document.

Filing Schedule and Review Periods

The MBTA anticipates filing the Track and Layover Final EIR with MEPA in May or June, 1995, and requests a public comment period of thirty (30) days. Current expectations are to file the Rail Operations and Station Construction Final EIR by the end of this year. A sixty (60) day public comment period will be requested.

CONCLUSION

The MBTA looks forward to your consideration of and favorable action on this request, and stands ready to respond to any questions that you might have or to consult with you and other interested parties on this proposed way of going forward. Please telephone Andrew Brennan at 617-722-3126 if you need further information, or if consultation is needed.

Sincerely,

Robert L. Mabardy
Interim General Manager

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Boston, 02202

WILLIAM F. WELD
GOVERNOR
ARGEO PAUL CELLUCCI
LIEUTENANT GOVERNOR
TRUDY COXE
SECRETARY

Tel: (617) 727-9800
Fax: (617) 727-2754

June 22, 1995

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS ON THE NOTICE OF PROJECT CHANGE

PROJECT NAME	:	Worcester Commuter Rail Extension
PROJECT LOCATION	:	Statewide
EOEA NUMBER	:	9154
PROJECT PROPONENT	:	Massachusetts Bay Transportation Authority (MBTA)
DATE NOTICED IN MONITOR	:	May 23, 1995

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and Section 11.17 of the MEPA regulations (301 CMR 11.00), I have reviewed the Notice of Project Change (NPC) submitted on the above project, and hereby approve the requested change in the Special Procedure for environmental impact review. The Special Procedure was developed for the Worcester Commuter Rail Extension Project in October 1992, pursuant to the MEPA regulations' provisions for designation of Major and Complicated projects. The NPC was filed in accordance with that procedure and in response to the March 16, 1995 Certificate on the Draft Environmental Impact Report (DEIR).

In the NPC, the MBTA requests permission to prepare and file two separate Final Environmental Impact Reports (FEIRs). The first FEIR would focus on proposed track and corridor improvements and on a permanent layover facility in Worcester. The second FEIR would address all remaining issues, and would include sections on rail operations, station siting and construction, alternatives, ridership, revenue issues, and the feasibility of a regional station. The NPC also requests the redesignation of Citizens' Advisory Committee (CAC) members (and the addition of representatives from Hopkinton and Framingham), a single distribution of comments on the DEIR, and a sixty day review period for the Rail Operations and Station Construction FEIR.

Final Environmental Impact Reports

The MBTA presents convincing reasons for filing two separate and sequential FEIRs. The March 1995 DEIR Certificate included a scope for both FEIRs. The MBTA's approach to addressing that scope, as discussed in the NPC, generally is satisfactory. Because the Operations/Station FEIR is intended to address any issues that are outstanding after the submittal of the Track/Layover Facility FEIR, the Certificate on the Track/Layover Facility FEIR will summarize remaining concerns that must be addressed in the Operations/Station FEIR. The Operations/Station FEIR also must include a response to comments on the Track/Layover Facility FEIR (and to the comments received on the current NPC), as well as the main response to comments on the DEIR (see "Procedural Matters", below).

Since the review of the DEIR, the MBTA has identified the need for an additional 1.5 miles of storage track west of Union Station in Worcester. This track was not included in the DEIR, and should be fully analyzed in the Track and Layover Facility FEIR. The reconstruction of the Route 85 railroad bridge in Southborough also should be included in that document.

The NPC proposes to include a summary of the report to the Legislature on the feasibility of a regional station in the Operations/Station FEIR. In the Certificate on the DEIR, I requested that the full report be made available for public comment through a notice in the Environmental Monitor. I reiterate that request, and encourage the MBTA to take account of public comment before it makes a final decision concerning the location of intermediate stations.

The Operations/Station FEIR should include a separate chapter that summarizes mitigation measures for the entire project. That chapter must include a Draft Section 61 Finding for all state permit areas. The Draft Section 61 Finding should contain clear commitments to mitigation, an estimate of the cost and funding source for each proposed mitigation measure, identification of the parties responsible for funding and/or implementing each measure, and a schedule for implementation of the mitigation.

Procedural Matters

Citizens' Advisory Committee (CAC). The CAC, which was appointed in 1992, includes representatives from the towns of Ashland, Grafton, Millbury, Southborough, Westborough, and the City of

Worcester, as well as designees of several transportation and planning organizations. The CAC has provided valuable assistance to me in the review of previous project documents, and I thank its members for their efforts.

Given the length of time that the CAC has had to work on this project, and the amount of effort that will be required in the FEIR phase, it seems appropriate to update membership. I will be asking the communities and organizations that have CAC representatives to either confirm their current designees or nominate new members in the next few weeks. In addition, I will expand the CAC membership to include representatives from Framingham and Hopkinton. A notice will be placed in the Environmental Monitor concerning the redesignation process. The current CAC will continue to operate until the redesignated CAC is appointed.

Distribution of Draft EIR Comments. Over 500 pages of comments from nearly 100 individuals and organizations were received on the DEIR. Most of these comments concerned station and operational issues, with relatively few discussing potential track and layover facility impacts. Because of the volume of comments, the MBTA has requested permission to distribute the DEIR comments and the full response to comments only with the Operations and Stations FEIR. Comments that are specific to the track and layover facility would be included in the first FEIR. I agree that a single distribution of comments makes sense in this case, and therefore grant permission to the MBTA to proceed in the manner described in the NPC.

Filing Schedule and Review Periods. The MBTA indicates that it will request an extended comment period of 60 days for the Operations and Stations FEIR, with a standard 30 day comment period for the Track and Layover FEIR. Given the intensity of interest concerning operations and station issues, the extended review period for the second FEIR is appropriate. At the current time, the MBTA anticipates that the first FEIR will be filed in the summer of 1995, with the second FEIR to follow at the end of the year.

June 22, 1995
DATE

Trudy Coxe
Trudy Coxe

Comments received : Framingham Planning Department, 6/12/95
TC/JGH/jh

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Boston, 02202

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September 14, 1995

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS ON THE FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	:	Worcester Commuter Rail Extension (Railroad Right-of-Way and Layover Facility)
PROJECT LOCATION	:	Statewide
EOEA NUMBER	:	9154
PROJECT PROPONENT	:	Massachusetts Bay Transportation Authority (MBTA)
DATE NOTICED IN MONITOR	:	August 8, 1995

The Secretary of Environmental Affairs hereby determines that the Final Environmental Impact Report submitted on the above project adequately and properly complies with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

The Worcester Commuter Rail Extension project is being reviewed by MEPA under a Special Procedure, in accordance with the MEPA regulations' provisions for Major and Complicated projects. In June of 1995, the MBTA received permission to prepare and file two separate Final Environmental Impact Reports for the project. The first would focus on proposed track and corridor improvements and on a permanent layover facility in Worcester. The second would address all remaining issues (including rail operations, station siting and construction, alternatives, ridership, revenue issues, and the feasibility of a regional station) and would provide a response to comments on the first FEIR. Today's Certificate covers the first of the two FEIRs.

Layover Facility

The preferred site for the permanent layover facility is the Conrail Yard in Worcester (Site 8). Thirteen alternatives were analyzed in the DEIR, none of which met all the MBTA's siting criteria. Site 8 was selected because it was near the proposed

permanent commuter rail terminal station and the current interim station, had few apparent environmental issues, and was located in an active rail area with primarily non-sensitive adjacent land uses.

Because the extended or overnight idling of locomotives is the primary source of noise and air quality impacts at a layover facility, the MBTA has committed to installing electrical plug-in power sources to reduce the amount of idling time to a minimum. Another factor in determining the level of impacts is the type of locomotive that is used. About one-third of the MBTA's current fleet of locomotives are an older model (Series "1000") that produces more pollutants and noise (including "pure tone" noise) than the newer locomotives. With the planned addition of 26 new locomotives (and the retirement of the older vehicles over the next decade), the 1000 series will account for less than one-fourth of the fleet. For purposes of impact analysis, it was assumed that one locomotive in four at the layover facility would be the older model.

The major concern with the proposed layover facility was potential impacts on the Mt. Carmel apartments, a housing complex for the elderly located about 260 feet north of the layover site.[1] The FEIR analyzed whether the construction and operation of the layover facility would have adverse air quality, noise or vibration[2] impacts on the residents of the apartments. Using the assumptions that overnight electrical power would be provided and that one-fourth of the locomotives would be the older model, the FEIR found that the layover facility would have minimal impacts in terms of air quality and induced vibration, and some noise impact.

Carbon monoxide (CO) and nitrogen dioxide (NO_2) emissions from vehicles using the commuter parking lot and from the locomotives were modelled for the FEIR. Predicted 1-hour levels of CO at the Mt. Carmel apartments ranged from 4.7 ppm to 3.8 ppm (including an ambient level of 3.0 ppm), compared to a maximum 1-hour standard of 35 ppm. Eight hour levels were estimated to be

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[1] The Mt. Carmel apartments and Our Lady of Mt. Carmel Church are the nearest sensitive receptors to the site.

[2] When trains are idling or travelling at low speeds, vibration impacts are most often caused by low frequency "pure tone" noise that induces vibration in building components, rather than by direct ground-borne vibration.

between 3.3 ppm to 2.7 ppm (with a background level of 2.0 ppm), compared to the 8-hour standard of 9 ppm. Somewhat higher levels were estimated for the sidewalks between the apartments and Shrewsbury Street; however, these also were well below the standards. A preliminary analysis of NO_2 levels indicated that there would be a slight increase in NO_2 at the apartments under worst case conditions in the morning; that increase would not result in a violation of air quality standards. I note that recent advances in technology (such as afterburners and new locomotives that have emission rates even lower than the newer vehicles in the MBTA's fleet) have the potential to reduce locomotive emission levels. The MBTA should consider the retrofitting of older locomotives and the purchase of the newest models in order to minimize train emissions.

In the FEIR, there is an analysis of "pure tone" noise, i.e. peaks in the sound frequency spectrum at one or more discrete frequency bands, produced by the different locomotives in the MBTA's fleet. Pure tones, especially those at low frequencies, can cause building vibration and an annoying "throbbing" sound even when the A-weighted sound level is low. The analysis shows that the older 1000 series locomotives violate DEP's noise policy for pure tones, while the newer vehicles do not. However, the frequency of the pure tones produced by the 1000 series locomotives is above the low frequency range that can cause vibration, which reduces impacts somewhat. For operational and scheduling reasons, the MBTA believes it is not feasible to restrict the use of the older locomotives on the Worcester line (which would be the most effective way to avoid impacts from pure tone noise). However, I urge it to investigate any other means that can be implemented to minimize or mitigate such impacts.

The Mt. Carmel apartments are located next to an exit ramp from Interstate Route 290, in an area of high ambient noise (76 dBA L_{dn}). Based on Federal Transit Administration (FTA) criteria for noise impacts on residential land uses, an increase of 0.5 dBA L_{dn} or more would be considered to be an "impact", and an increase of 2 dBA L_{dn} or more would be a "severe impact".[3] Under the "best case" scenario (all new locomotives), the increase in noise at the Mt. Carmel apartments would be less than 0.5 dBA L_{dn}. However, the increase under the "baseline" scenario (one-fourth older locomotives) would be 1 DBA L_{dn}. Under current guidelines used by the MBTA (and which are based on FTA standards),

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[3] Under FTA standards, very little additional noise is allowable in areas of high ambient noise.

increases in noise that cause a property to fall in the "impact" range only need to be mitigated if the increase over ambient conditions is 5 dBA or more. Nevertheless, consideration should be given to measures that can reduce noise impacts to the "no impact" level.

I find that the FEIR adequately addresses the issues concerning the layover facility that were raised in the Certificate on the DEIR. The primary concern was about noise impacts, and the noise analysis was revised and expanded in the FEIR, and mitigation measures were formulated.

The major mitigation measure that is being proposed by the MBTA to address noise and air quality impacts (the provision of electrical power to minimize engine idling) has been incorporated into the FEIR impact analyses. Without that measure, noise exposure at the Mt. Carmel apartments could be expected to increase by 8 to 10 dBA L_{dn}, clearly an unacceptable situation. Through its commitment to providing overnight electrical power the MBTA has been able to reduce potential impacts from layover operations significantly. I note that the FEIR mentions that an additional measure is planned (the provision of an air compressor to maintain brake pressure overnight) that will reduce morning locomotive idling time, and possibly further reduce noise and air impacts. A commitment to that measure should be included in the section on mitigation and the Draft Section 61 Finding that will be part of the Operations/Stations FEIR, as well as any other measures that are developed by the MBTA.

Railroad Right-of-Way

The FEIR generally has evaluated the impacts that are related to the construction of the railroad right-of-way in an adequate manner. However, there are several areas where additional analysis is required. The major areas that need further clarification include historic and archaeological resources, and vibration impacts. The Special Procedure for this project was set up to allow unresolved issues from the first FEIR to be further addressed in the second FEIR, and I expect that the proponent will do so.

The second FEIR must fully address the concerns of the Massachusetts Historical Commission. Summary results from the intensive survey for the second railroad track must be included. If possible, that information should be provided to MHC before the completion of the FEIR, so that its recommendations for

avoiding, minimizing or mitigating impacts can be incorporated into the document. I note that the MHC has found the building and bridge inventory forms that were provided by the proponent to be incomplete and inadequate. The MBTA and its cultural resources consultant should meet with MHC staff as soon as possible to correct these deficiencies.

An evaluation of vibration impacts was included in the right-of-way FEIR because some potential mitigation measures would affect the construction of the rail bed, and therefore could have secondary environmental impacts. The FEIR found that there would be annoyance-level vibration impacts on 19 residences, but all impacts would be below the level that would cause structural damage. Because of the low frequency content of the vibration that the commuter rail trains produce, potential path vibration control treatments (such as ballast mats) would be largely ineffective, and are not being proposed. The only vibration mitigation measure being proposed is to regularly maintain train wheels and trackbed.

More detailed information should be provided concerning vibration impacts on the 19 residences. This should include a description of the magnitude of impact on each structure, so that the effectiveness of alternative mitigation strategies can be better evaluated. The feasibility and effectiveness of strategies such as reduction of train speeds, building acquisition, or purchase of vibration easements should be discussed in detail.

I note the concerns of the CAC about the possibility that vibration impacts will be greater than described in this FEIR if some or all of the intermediate stations are not built. If assumptions concerning the number or location of intermediate stations change, the vibration analysis must be revised. Other issues that the CAC has raised, including vibration impacts on commercial land uses such as restaurants, should also be addressed.

A number of comments were received concerning the Route 85 bridge in Southborough. There is a difference of opinion among the MBTA, the MHD, and the Town of Southborough whether the bridge clearance should be raised, and if so, to what height. This issue is relevant to this office only to the extent that the bridge design impacts environmental resources. The MBTA, MHD and the Town should continue their discussions, and try to resolve their differences. If the bridge height that is selected differs from that described in the right-of-way FEIR, an analysis of its environmental impacts should be included in the second FEIR.

DEP notes that a number of its comments on the DEIR were not fully addressed in the right-of-way FEIR. Those comments must be addressed in the Operations/Stations FEIR (along with all remaining comments on the DEIR). In addition, DEP's comments concerning application of herbicides near public water supplies (as well as municipal water supplies) should be noted, and the plans or maps that they request should be included in the second FEIR.

Miscellaneous

Information on alternatives, ridership, and revenue issues has been included in this FEIR in order to explain the project's background. That information also will be provided in the second FEIR, at which time it will be fully reviewed by this office.

Finally, it has been brought to my attention that track work has been occurring in the Worcester rail corridor. The proponent has assured me that this work is being conducted by Conrail, and is not part of this project. The MBTA is aware that all environmental analysis that is required under MEPA must be adequately completed before construction of this project can begin.

September 14, 1995
Date

Trudy Coxe

Comments received : DEP/CERO, 8/31/95
Worcester OPCD, 8/31/95
CAC, 9/5/95
MHC, 9/6/95
Southborough Selectmen, 9/6/95
L. Bogar, 9/6/95
MHD, 9/7/95
K. Davison, 9/7/95

TC/JGH/jh

Massachusetts Bay Transportation Authority

William F. Weld, Governor
Argeo Paul Cellucci, Lieutenant Governor
James J. Kerasiotes, Secretary and MBTA Chairman
Patrick J. Moynihan, General Manager

October 31, 1995

The Honorable Trudy Coxe, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02202

Attention: MEPA Unit

Subject: Worcester Commuter Rail Extension
EOEA #9154 Notice of Project Change
to Prepare Separate Final Environmental
Impact Reports (EIRs) for Stations

Dear Secretary Coxe:

The Massachusetts Bay Transportation Authority (MBTA) Draft Environmental Impact Report (EIR) to extend commuter rail service to Worcester was found by you to comply with the Massachusetts Environmental Policy Act and with its implementing regulations on March 16, 1995. The Worcester Rail review is being carried out as a Major and Complicated project under the control of a Special Procedure. Under the provisions of the Special Procedure, the MBTA is allowed certain discretion in filing multiple Final EIRs for the project subject to your concurrence.

Our previous Notice of Project Change, dated May 12, 1995, requested permission to prepare and file two separate Final EIRs -- the first for railroad right-of-way (track improvements) and the layover facility and the second for railroad operations and stations. Your Certificate, dated June 22, 1995, approved this procedure. The first Final EIR covering track and layover was submitted on July 31, 1995, and you found it to be in compliance by your Certificate of September 14, 1995.

We seek by this letter your permission to prepare and file two further Final EIRs in lieu of one Final EIR for railroad operations and stations; these will cover all remaining issues noted in your Certificate on the previous Notice of Project Change and in your Certificate on the track and layover Final EIR. This request is prompted by the unresolved issues pertaining to final determination of station locations in Ashland, Southborough, and Westborough, especially pertaining to their interaction around ridership and traffic and the need to address these three stations simultaneously with reconsideration of a possible regional station.

At this time, it appears that only the Grafton Station located off Pine Street and the Millbury Station located off Route 20 (in Worcester) are ripe for a Final EIR, hereafter called the second Final EIR, in order to provide basic commuter rail service (ten trains inbound and ten trains outbound, daily) to area commuters. When outstanding questions are resolved, the third Final EIR will be prepared for the stations the MBTA still plans in Ashland, Southborough and Westborough.

Each of the proposed Final EIRs will provide an introductory description of the project as a whole so that context can be maintained. In addition, we suggest below the particular topics to be considered in each document. We hope you agree with us that this approach will provide for the greatest environmental benefit and offer the greatest opportunity for informed public comment.

PROPOSED RAILROAD OPERATIONS/MILLBURY & GRAFTON STATIONS FINAL EIR

The second Final EIR is intended to deal with the likely impacts associated with the construction and operation of the Millbury and Grafton Commuter Rail Stations and the potential impacts between Worcester and Framingham associated with the expansion of commuter rail service from the present three round trips daily (interim service) to ten round trips daily (basic service). Other subjects will include response to the Secretary's Certificate and to comments by the CAC and others on the November 1994 Draft EIR, and response to the Secretary's Certificate and to comments by the CAC and others on the July 1995 Final EIR for the railroad right-of-way and layover facility, as each of these bear on the Millbury and Grafton Stations and basic service operations.

<u>Rail Operations</u>

The primary focus of this section of the second Final EIR will be on the elements of and potential impacts from basic service commuter train service presented in the Draft EIR. The impact from noise and vibration will be further assessed and, where appropriate, mitigation will be proposed. This analysis will include the effects of increased train speed without the Westborough, Southborough, and Ashland Stations. The MBTA will provide a further discussion of its financial capability to operate this service without adversely affecting its services elsewhere. Additional light will be shed on existing transportation networks and mode choice factors. The MBTA has had the opportunity to assess the impact of interim service on other HOV modes and will present these data along with any needed additional evaluation of ridership projections in the Final EIR.

Station Construction

The MBTA is continuing to work with CAC and representatives of the five communities in which intermediate stations are proposed to finalize station sites. The Draft EIR presented impact analyses for fixed locations (in Grafton, Westborough, and Southborough) and for stations which have alternative sites (in Millbury and Ashland). With the filing of the second Final EIR, a firm presentation will be made on the Millbury Station for which the Route 20 site is preferred, and the Grafton Station at Pine Street. The Final EIR will include proposed mitigation. Potential archaeological, historical, and agricultural impacts also will be reexamined. A time frame and sequencing for station construction will be presented, having as its goal a smooth transition from interim to basic service.

Response to Comments

For this second Final EIR, a response to comments section will address comments, other than those on track and layover matters and for the Westborough, Southborough, and Ashland Stations, raised in the Draft EIR Certificate, in the CAC's Draft EIR comments, and in additional comments submitted. Here, however, given the bulk of comments and the similar subject matter of many of them, the MBTA proposes to prepare a consolidated "Response to Commonly Raised Questions" as a part of the response to comments chapter. If this is acceptable, most comments can be dealt with effectively and without repetition. We also propose to use an index table to direct commentors to responses in the body of the text and to respond directly to singular comments that are not dealt with in the response to commonly raised questions or elsewhere in the text. This index will be updated and completed in the third Final EIR.

PROPOSED WESTBOROUGH, SOUTHBOROUGH AND ASHLAND COMMUTER RAIL STATIONS FINAL EIR

The third Final EIR is intended to address impacts and mitigation measures associated with the construction of rail stations in Westborough, Southborough, and Ashland. Other subjects which might be carried forward from the first Final EIR covering the railroad right-of-way and layover facility and/or from the second Final EIR detailed above will be addressed as necessary. Included among these will be the noise and vibration effects of the three intermediate station stops not considered in the second Final EIR.

Regional Station Analysis

The Legislature directed the MBTA to complete a report on a regional station as part of the recently passed Transportation Bond Bill. To respond to this requirement, the MBTA has engaged an independent consultant to assess the potential for, costs of, and benefits of a regional station in the vicinity of Route 9 and I-495. The third Final EIR will summarize the results of this report. The MBTA will, as it has in the past, carefully consider the concerns and arguments raised about a regional station during this and other reviews and will discuss the ongoing regional station analysis with the CAC. These topics will bear directly on the proposed stations in Westborough, Southborough, and Ashland and therefore, are proposed to be covered in the third Final EIR.

FILING SCHEDULE AND REVIEW PERIODS

The MBTA anticipates filing the second Final EIR with MEPA in January 1996 and requests a public comment period of sixty (60) days. The third Final EIR will be filed once we receive clear direction from the involved municipalities as to their commitment to stations.

COMMENCEMENT OF CONSTRUCTION

In the "Miscellaneous" Section of the September 14, 1995 Certificate on the Track and Layover Final EIR, you commented on work being done prior to finishing environmental review. The work being discussed is, in fact, being done by Conrail, as the owner of the line and is separate and apart from the MBTA project.

The MBTA is interested in going into construction on portions of work for which environmental review is complete, that is, the track and layover. This work must be started before the end of the 1995 construction season in order to maintain our S.I.P. commitment of revenue service by December 31, 1996. We believe going forward on this portion is fully consistent with the original intent of the "Major and Complicated" designation in the certificate on the Major and Complicated designation. Secretary Susan F. Tierney indicated that "... if it appears that there is an opportunity to proceed with certain elements of the project, then the MBTA may opt to file an FEIR for the elements where the analyses are complete." (EOEA No. 9154 Special Procedure Certificate October 8, 1992, page 3.) Earlier, the Secretary wrote " ...I believe that early commencement of this project, or portions of the project, may have positive impacts on air quality, by reducing the number of vehicle miles of travel in the Commonwealth, and by reducing the demand for parking in congested urban areas." (Ibid, page 2.)

The decision to apply for a Major and Complicated designation was clearly done with an eye toward commencing portions of this project earlier than others. Separating the sections does not in any way violate the intent of MEPA, since the track and layover are clearly separate and discreet portions of the project, each of which can stand independently.

By way of this Notice of Project Change, we seek clarification as to whether or not portions, such as the track and layover, for which MEPA review is complete, can proceed with construction.

CONCLUSION

The MBTA looks forward to your consideration of a favorable action on this request, and stands ready to respond to any questions that you might have or to consult with you and other interested parties on this proposed way of going forward. Please telephone Andrew Brennan , MBTA Manager of Environmental Affairs, at 617-222-3126 if you need further information, or if consultation is needed.

Sincerely,

Patrick J. Moynihan
General Manager

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Boston, 02202

WILLIAM F. WELD
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January 10, 1996

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
NOTICE OF PROJECT CHANGE

FILE COPY

PROJECT NAME	:	Worcester Commuter Rail Extension
PROJECT LOCATION	:	Statewide
EOEA NUMBER	:	9154
PROJECT PROPONENT	:	Massachusetts Bay Transportation Authority (MBTA)
DATE NOTICED IN MONITOR	:	November 7, 1996

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and Section 11.17 of the MEPA regulations (301 CMR 11.00), I have reviewed the Notice of Project Change (NPC) submitted on the above project, and hereby approve the requested change in the Special Procedure for environmental impact review.

The Special Procedure was developed for the Worcester Commuter Rail Extension Project in October 1992, pursuant to the MEPA regulations' provisions for designation of Major and Complicated projects. A Draft Environmental Impact Report (DEIR) was filed in November 1994 and was certified as adequate in March 1995. By a Certificate dated June 22, 1995, the Special Procedure was amended to permit the filing of two separate Final Environmental Impact Reports (FEIRs). The first FEIR, which looked at issues concerning track and corridor improvements and a permanent layover facility in Worcester, was certified as adequate on September 14, 1995. The second FEIR was to address all remaining issues (including rail operations, station siting and construction, alternatives, ridership, revenue issues, and the feasibility of a regional station) and provide a response to comments on the DEIR and the first FEIR.

In the current NPC, the MBTA requests permission to address the issues originally planned for inclusion in the second FEIR in two separate FEIRs. This request was prompted by unresolved issues pertaining to final determination of station locations in Ashland, Southborough, and Westborough. In addition, in a Notice of Project Change that was submitted on the Framingham Terminal Development (EOEA #10106) on November 30, 1995, the MBTA asked to transfer the discussion of environmental issues associated with

that project to the Worcester Commuter Rail Extension project.[1] As it is uncertain when the siting of the three stations to the west of Framingham will be decided, I agree that it is appropriate to proceed with the analysis for railroad operations, and the Millbury, Grafton and Framingham stations, with the FEIR for the Ashland, Southborough and Westborough stations to follow at a later date.

Railroad Operations/Millbury, Grafton and Framingham Stations FEIR

This FEIR should focus on the impacts associated with the construction and operation of the Millbury and Grafton station; operation of the Framingham station and expansion of parking facilities; and expansion of commuter rail service from the interim level (three round trips per day) to basic service (ten round trips per day). It also must address the issues that were identified in the review of the November 1994 Draft EIR, the July 1995 FEIR on the track improvements and layover facility, the December 1995 Notice of Project Change on the Framingham Terminal Development, and the current Notice of Project Change as they relate to the Millbury, Grafton and Framingham stations and to basic rail service.

Major issues to be evaluated include noise and vibration, historic and archaeological resources, and agricultural resources. Sections also should be provided on alternatives, ridership, impacts on other transportation modes, and revenue/financial capability issues. I find the MBTA's proposal to prepare a consolidated "Response to Commonly Raised Questions" to address repetitive comments, along with an index table to direct readers to responses in the FEIR text is an acceptable method to deal with the large number of comments that have been received.

Ashland, Southborough and Westborough Stations FEIR

This FEIR should address any issues that remain from any of the previous EIR or NPC reviews, and summarize mitigation

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[1] That request was granted in a Certificate also issued today. As the NPC for the Framingham Terminal was filed after the NPC for the Worcester Commuter Rail Extension, issuance of this Certificate was postponed in order to coordinate the two decisions.

measures proposed for the entire project. The focus of the report will be on the impacts of the construction and operation of the proposed rail stations at Ashland, Southborough and Westborough. The MBTA also proposes to include a summary of the report to the legislature on the feasibility of constructing a regional station.

Construction of Layover Facility and Track Improvements

The Certificate that set up the Special Procedure for the Worcester Commuter Rail Extension anticipated that the MBTA might want to proceed with elements of the project for which analysis was complete (assuming that those elements would not preclude or presuppose the implementation of additional project alternatives), and prepare separate FEIRs and Section 61 findings for those elements. This has, in fact, occurred. In the current NPC, the MBTA asked for clarification of the conditions under which they might begin construction of the project elements that were analyzed in the first FEIR, which covered track improvements and the permanent Worcester layover facility.

At the time that the FEIR on the Permanent Layover Facility and Track Improvements was certified as adequate, there were some unresolved issues concerning potential archaeological resources in the area to be impacted by the track improvements. Since then, the MBTA has met with the Massachusetts Historical Commission to resolve those issues, and has prepared a Section 61 Finding for the elements covered in the first FEIR that describes its mitigation commitments. Given those commitments, I find that the parts of the project that were analyzed in the Track and Layover FEIR may proceed.

Filing Schedule and Review Periods.

The MBTA indicates that it will request an extended comment period of 60 days for the Operations/Millbury, Grafton and Framingham Stations FEIR. Given the intensity of interest concerning operations and stations, the extended review period for that FEIR is appropriate. At the current time, the MBTA anticipates that it will be filed early this year. The scheduling for the Westborough, Southborough and Ashland Stations FEIR is uncertain.

Citizens' Advisory Committee (CAC)

The communities and organizations that are participating in the CAC have been asked to confirm their current designees or nominate new members, and the Towns of Hopkinton and Ashland have been requested to nominate representatives for the first time. Most of those individuals who were designated by the municipalities and organizations represented on the CAC are current members or have been attending CAC meetings, and I am pleased at their continuing interest in assisting with this important project. A list of my appointments to the CAC is attached to this Certificate.

January 10, 1996
DATE

Trudy Coxe

Comments received : Sen. Matthew Amorello, 11/6/95
City of Worcester OPCD, 11/14/95
MHC, 11/16/95

TC/JGH/jh

Worcester Commuter Rail Extension
Citizens' Advisory Committee
January 10, 1995

Dexter Malone (Ashland)	179 Cordaville Rd., Ashland 01721
Shaun Finnegan (Ashland)	26 Voyagers Lane, Ashland 01721
Frank Healey (Ashland)	54 Sudbury Rd., Ashland 01721
John Stasik (Framingham)	15 Chouteau Ave., Framingham 01701
Lydia Bogar (Grafton)	8 Bernard Rd., N. Grafton 01536
David C. Robbins (Grafton)	92 George Hill Rd., Grafton 01519
Edward J. Ropiak (Grafton)	22 Cross St., S. Grafton 01560
John A. Reil (Grafton)	78 Wesson Rd., N. Grafton 01536
David S. Goldman (Hopkinton)	20 Fruit St., Hopkinton 01748
David A. Holbrook (Hopkinton)	135 Fruit St., Hopkinton 01748
Andrew J. Boyce (Hopkinton)	281 Cedar St., Hopkinton 01748
Margaret Lavallee (Millbury)	14 Oaks St., Millbury 01527
Jeffrey Dore (Millbury)	1484 Grafton Rd., E. Millbury 01527
Fred Moseley (Millbury)	122 Millbury Ave., Millbury 01527
Stephen Bishop (Millbury)	127 Elm St., Millbury 01527
Mary MacAdam (Millbury)	6 Ackerman Rd., E. Millbury 01527
Patricia Murphy Capone (Southboro)	21 Richards Rd., Southborough 01772

Citizens Advisory Committee (continued)

Wayne Thies (Southborough)	42 Latisquama Rd., Southborough 01772
William J. Christensen (Southboro)	17 Granuaile Rd., Southborough 01772
Mark W. Davis (Southborough)	13 Skylar Dr., Southborough 01772
Judith McCabe (Westborough)	15 Maynard St., Westborough 01581
Michael O'Bryan (Westborough)	23 Steven Rd., Westborough 01581
Stephen Doret (Westborough)	23 Mill Rd., Westborough 01581
James (Randy) Waterman (Westboro)	25 Nash St., Westborough 01581
Robert Gentile (APT)	77 Cottage St., Framingham 01701
Kathleen Bartolini (MetroWest)	8 View Hill Rd., Southborough 01772
Ed Bates (MAPC)	MAPC, 60 Temple Pl., Boston 02111
Senator Matthew J. Amorello	State House Rm. 314, Boston 02133

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
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TRUDY COXE
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RECEIVED
JUN 20 1996
BY

June 14, 1996

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	:	Worcester Commuter Rail Extension (Millbury, Grafton and Framingham Stations, Railroad Operations)
PROJECT LOCATION	:	Statewide
EOEA NUMBER	:	9154
PROJECT PROPONENT	:	Massachusetts Bay Transportation Authority (MBTA)
DATE NOTICED IN MONITOR	:	April 10, 1996

The Secretary of Environmental Affairs hereby determines that the Final Environmental Impact Report submitted on the above project adequately and properly complies with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

A Special Procedure was developed for the Worcester Commuter Rail Extension Project in October 1992, pursuant to the MEPA regulations' provisions for designation of Major and Complicated projects. A Draft Environmental Impact Report (DEIR) was filed in November 1994 and was certified as adequate in March 1995. By a Certificate dated June 22, 1995, the Special Procedure was amended to permit the filing of two separate Final Environmental Impact Reports (FEIRs). The first FEIR, which looked at issues concerning track and corridor improvements and a permanent layover facility in Worcester, was certified as adequate on September 14, 1995. The second FEIR was to address all remaining issues (including rail operations, station siting and construction, alternatives, ridership, revenue issues, and the feasibility of a regional station) and provide a response to comments on the DEIR and the first FEIR.

A Notice of Project Change was filed by the MBTA in November 1995 that requested permission to address the issues originally planned for inclusion in the second FEIR in two separate FEIRs. This request was prompted by unresolved issues pertaining to final determination of station locations in Ashland,

Southborough, and Westborough. In addition, in a Notice of Project Change that was submitted on the Framingham Terminal Development (EOEA #10106) on November 30, 1995, the MBTA asked to transfer the discussion of environmental issues associated with that project to the Worcester Commuter Rail Extension project. Both requests were granted in a Certificate issued January 10, 1996.

The current FEIR focuses on environmental impacts associated with the construction and operation of the proposed Millbury and Grafton stations, operation of the Framingham Station and expansion of parking at that location, and the expansion of commuter rail service from the interim level (three round trips per day) to basic service (ten round trips per day). It also addresses remaining issues from (and responds to comments on) the November 1994 Draft EIR, the July 1995 FEIR on track improvements and the Worcester layover facility, the December 1995 Notice of Project Change on the Framingham Terminal Development, and the January 1996 Notice of Project Change as they relate to the Millbury, Grafton and Framingham stations and to basic rail service.

The Final EIR on the Ashland, Southborough and Westborough stations will focus on issues related to construction and operation of commuter rail stations in those communities. It also will address all remaining issues from any of the previous EIR or NPC reviews and respond to comments on the current FEIR.

Millbury and Grafton Stations

The preferred alternative for the Millbury station is located just south of the Worcester city boundary, and would be accessed from Route 20 in Worcester (opposite the "Big Y") by a new 3,000 foot long road.[1] The Grafton station is proposed for a site west of Pine Street and north of Route 30. The Millbury station will have parking for 300 vehicles, with 265 parking spaces at Grafton. Each station will have two 800-foot low level platforms, two 45-foot long raised access platforms for the disabled, a passenger drop-off area, a pedestrian bridge over the tracks, station canopy, site lighting and landscaping, and bicycle racks.

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[1] - The DEIR also looked at an alternative site a few hundred feet away, which would have been accessed from Route 122 in Millbury.

Issues associated with the Grafton station have been thoroughly addressed, and development of that station appears to have widespread support. In contrast, considerable controversy has arisen concerning the Millbury station, partially due to the relatively late notification of the closest abutting residents in Worcester (at the Flint Pond subdivision) that an access road and station were planned next to their neighborhood.[2] As the Southborough Board of Selectmen points out in its comment letter, many of the concerns expressed by the Worcester abutters to the Millbury station are relevant to all proposed stations for this project (such as concerns about vandalism at parking lots, outsiders coming into a neighborhood, responsibility for policing and emergency response), and the MBTA must be consistent in developing solutions to address them at all stations. I request the MBTA to provide information on these issues in the FEIR on the Ashland, Southborough and Westborough stations.

The issues that are within the jurisdiction of this office (i.e. environmental issues), however, have been adequately addressed for the Millbury station in the FEIR.[3] Visual screening and control of lighting at the parking lot are proposed as mitigation, and the MBTA plans to work with the City and neighbors to develop additional measures. A stormwater detention basin is proposed to mitigate impacts of stormwater runoff from the parking lot, along with the implementation of Best Management Practices (sweeping, catch basins with sumps and oil/grease traps). These measures will be finalized in cooperation with the Millbury Conservation Commission.[4] In the FEIR, a traffic signal is proposed at the entrance drive. However, the Massachusetts Highway Department questions whether this signal is warranted,

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[2] - The nearest developed parcel is approximately 150 feet from the edge of the parking lot, with the nearest house about 340 feet away. One undeveloped lot in the subdivision must be acquired by the MBTA to construct the access road.

[3] - The MBTA and the Massachusetts Historical Commission have executed a Memorandum of Agreement (contained in Appendix H of the FEIR) that ensures completion of all historical and archaeological studies before construction begins. I find that agreement to be acceptable to address the MEPA scope. Summary results of all studies conducted under the MOA should be contained in the FEIR on the Ashland, Southborough and Westborough stations.

[4] - Parts of the access road and parking lot are within 100 feet of wetlands. No direct wetland impacts are planned.

and plans to work with the proponent to finalize appropriate mitigation at that location. The Final Section 61 Findings must report on the results of all further discussions concerning mitigation, and propose a final mitigation package.

Because of the opposition that has arisen concerning the Millbury station, it is possible that the MBTA will consider going forward with only the Grafton station at this time, especially since the analysis in the FEIR shows that elimination of the Millbury station would not affect total ridership. However, if only the Grafton station is built projected ridership from that location can be expected to double (from approximately 216 to 444) in the short term, in effect creating a regional station. While the community appears willing to accept that scenario[5], the full impacts of an expanded facility at Grafton have not been analyzed, nor have mitigation measures been proposed. In addition, 'overconstruction' of a Grafton station (which would occur if a Millbury station were constructed at a later date) would be inadvisable on both environmental and financial grounds.

If the MBTA decides to eliminate the Millbury station from its plans, the FEIR on the Ashland, Westborough and Southborough stations should include a thorough analysis of the impacts of an expanded Grafton station. Similarly, if a different site is proposed for the Millbury station, it also should be evaluated in that document.

The proposed site of the Grafton station currently is owned by the Commonwealth of Massachusetts, Division of Capital Planning and Operations (DCPO) (the FEIR incorrectly stated that transfer of the land had already been accomplished). DCPO has requested that the analysis in the current FEIR serve as environmental documentation for the land transfer. In order to avoid duplicative environmental review by this office, I grant that request, and do not require the filing of an Environmental Notification Form for the land transfer.

Framingham Station

The major issues associated with the Framingham station are

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[5] - The Grafton Board of Selectmen have stated their support for construction of a Grafton station, whether a Millbury station is constructed or not (assuming that traffic mitigation is provided at the Route 140/Route 122/Bridge Street intersection).

traffic congestion and parking demand/supply. Given the difficulties in resolving these issues completely in a densely developed urban setting, the mitigation measures proposed in the FEIR make considerable progress toward that goal. Nevertheless, continued coordination between the Town and the MBTA will be essential to maximize ridership (and achieve attendant regional air quality benefits) while minimizing adverse local impacts.

While it is understandable that the MBTA wants to delay a decision on the construction of additional parking (beyond the 95 new spaces currently proposed) until the status of the proposed Ashland, Southborough and Westborough stations is resolved, it is clear that there will be excess parking demand at Framingham for at least several more years.[6] Additional measures that can be taken to address short-term parking problems (such as incentives for carpooling to the station, improved pedestrian connections to the Pearl Street garage or use of satellite lots and shuttles) should be seriously considered and developed in coordination with local officials.

The FEIR states that discussions between the Town and the MBTA concerning the Framingham Station are continuing. I recommend that forum be used to address the remaining issues concerning the Framingham station that are mentioned in the comment letters from the Framingham Planning Department and the MetroWest Growth Management Committee. These include the provision of a ticket kiosk at the station, a possible MBTA contribution to the rubberizing of the Bishop Street grade crossing, selection of a preferred alternative for mitigation at the Route 135/Route 126 intersection, and integration of station improvements with the Town's streetscape program. The Final Section 61 Findings should report the results of the discussions with the Town and the full mitigation package.

Railroad Operations

The FEIR analyzes the regional air quality impacts of the Worcester Commuter Rail Extension project based on the impacts of auto trip diversion to commuter rail, of auto trip diversion on Peak Hour Massachusetts Turnpike Operations and of commuter rail

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[6] - Several commenters suggest that ridership at Framingham is (and will be) higher than described in the FEIR. If this is the case, accompanying parking demand also will be greater than described.

operations (locomotive emissions). It is clear that the project will have positive impacts on regional air quality. With basic service (ten round trips per day), provision of commuter rail to the Worcester, Millbury and Grafton stations alone would result in a daily reduction in volatile organic compounds (VOCs) of 74 kilograms (kg), in oxides of nitrogen (NOx) of 14 kg, and in carbon monoxide (CO) of 800 kg at the end of 1996. If all stations were to be constructed in 1996, reductions would increase to 133 kg for Vocs, 106 kg for NOx and 1384 kg for CO. These numbers decrease slightly by the year 2001, due to projected improvements in automobile pollution controls.

While the benefits of this project are significant, increased rail service also has the potential for adverse impacts, in particular noise and vibration impacts and impacts on local traffic at grade crossings. The FEIR identifies seven residences that will be subject to noise impacts from Basic Service. Five of these properties are clustered near Route 140 in Grafton. The MBTA proposes to construct a 500-foot long noise barrier to mitigate impacts on those homes. No mitigation is proposed for the two remaining homes (in Grafton and Westborough). While provision of a noise barrier in those two locations may not be reasonable given its excessive cost (estimated at $64,000 per location), strong consideration should be given to providing receiver noise control (for example, additional window glazing, weather stripping).

Annoyance level vibration impacts are predicted to occur at fifteen residential units if all stations are built, and at 23 units if only Millbury and Grafton stations are built.[7] A variety of vibration mitigation strategies are discussed; however, the analysis finds most of these to be ineffective for mitigating the type of vibration that is generated. Although the MBTA proposes to implement track and equipment maintenance measures to mitigate vibration impacts, it admits that such measures may not completely eliminate vibration impact attributable to this project. The MBTA states that reducing train speeds would "not meet the objectives of the project." It is not made clear why this is so, and that alternative should be considered further.

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[7] - Vibration levels are strongly related to train speed. If only Millbury and Grafton stations are built, trains passing through the towns between Grafton and Framingham will be travelling faster in certain areas than they would under the "Build all stations" scenario.

The FEIR examines several options for alleviating the traffic impacts of additional gate closings at Main Street and Cherry Street in Ashland. Structural alternatives (such as grade separations) did not appear to be feasible, because of the extent of impacts resulting from such measures. Some improvements can be achieved through optimization of signal timing; however, afternoon peak hour Level of Service decreases at the Main/Union Street intersection. It is suggested in the FEIR that if and when an Ashland station is constructed vehicle volumes at the impacted intersections may decrease, thereby offsetting the impacts of the gate closings. The MBTA proposes to study this issue further after a location is selected for the Ashland station, and to propose additional mitigation in the EIR covering the Westborough, Southborough and Ashland stations.

Financial Feasibility

The MBTA has requested me to find that financial considerations concerning the project, including cost-effectiveness, have undergone sufficient MEPA review. The FEIR states that the financial feasibility of this project has been demonstrated because funds have been authorized by the Legislature for this project; the Boston Metropolitan Planning Organization has determined the overall financial capacity of the MBTA to maintain existing and proposed transit initiatives (including this project); and the project has been included by the Commonwealth in the State Implementation Plan. As review of financial issues under MEPA focuses on their effect on the selection of alternatives and mitigation measures (and consequently on environmental impacts), I find that the analysis provided to date on financial feasibility is adequate to meet MEPA review requirements.

FEIR on Ashland, Southborough and Westborough Stations

The FEIR on the Ashland, Southborough and Westborough stations is the final document that is scheduled to be submitted under the Special Procedure for the Worcester Commuter Rail Extension. That report should address any issues that remain from any of the previous EIR or NPC reviews, respond to comments on the current FEIR and summarize mitigation measures proposed for the entire project. A proposed implementation schedule for each

mitigation action should be provided. All Section 61 Findings for the project should be included in the FEIR, in Draft or Final form, as appropriate.

June 14, 1996
Date

Trudy Coxe

Comments received : P. Foley, 5/9/96
E. Kelly, 5/10/96
DCPO, 5/13/96
Westborough Board of Selectmen, 5/17/96
J. Bonofiglio, 5/17/96
C. Fenlon, 5/17/96
Flint Pond Residents, 5/17/96
Worcester City Councillor S. Patton, 5/31/96
Worcester City Councillor P. Clancy Jr., 5/31/96
DEP/CERO, 6/3/96 and 5/24/96
Millbury MBTA Advisory Committee, 6/3/96
Grafton Town Adminstrator D. Morgado, 6/4/96
State Representative Paul Kollios, 6/4/96
DFA, 6/4/96
State Senator Matthew J. Amorello, 6/5/96
Worcester OPCD, 6/6/96
MHD, 6/6/96
Ashland Town Manager D. Blois, 6/6/96
Mass. Audubon, 6/6/96
Southborough Planning Board, 6/7/96
Southborough Board of Selectmen, 6/7/96
Metrowest Growth Management, 6/7/96
Framingham Planning Dept., 6/7/96
K.K. Davison, 6/7/96
Boston Environment Dept., 6/7/96
MHD, 6/7/96

TC/JGH/jh

CITIZENS ADVISORY COMMITTEE (CAC) COMMENTS ON FEIR, JANUARY 28, 1997

Worcester Commuter Rail Extension Project
Citizens Advisory Committee

JAN 30 1997

Date January 28, 1997

To Secretary of Environmental Affairs

From Citizens Advisory Committee

Subject CAC Comments on Third FEIR (Westboro, Southboro, Ashland), EOEA #9154

Following are the CAC's comments on the Westboro, Southboro, and Ashland Final Environmental Impact Report (FEIR) for the Worcester Commuter Rail Extension Project, submitted for publication as part of the FEIR.

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1. Inconsistencies Between Text and Responses to Comments

The CAC has noted some inconsistencies between the main text of the FEIR (sections 1-7) and the responses to comments (section 8). These have been brought to the attention of the project proponent; the CAC expects that the proponent will have corrected them in the FEIR that is submitted for public review and comment. However, some inconsistencies may remain. The CAC believes that where there is such an inconsistency, the main text should be considered the definitive text.

2. Population Estimates

The population estimates used as the basis for the ridership projections in this FEIR, as well as in the March 1996 FEIR, are badly outdated. The CAC has surveyed a number of the towns in the study area, and has found many cases where the population reported in the 1990 census or compiled by the town clerks for 1996 is significantly greater than that estimated for the year 2010 in the study. Consider the following:

City/Town	Est. 2010	1990 Census	Town Census	(date)
Hopkinton	**9,400**	9,191	**11,400**	1/96
Southborough	7,700	6,628	7,432	1/96
Marlborough	35,250	31,813	35,000	1/96
Northborough	**11,620**	11,929	**13,232**	10/96
Westborough	**13,600**	14,133	**15,997**	11/96
Upton	**4,910**	4,677	**5,799**	2/96
Northbridge	**12,750**	13,372	**13,501**	1/96
Shrewsbury	**23,120**	24,146	**26,354**	12/96
West Boylston	**5,660**	6,600	**6,472**	1/96
Worcester	170,000	158,833	154,222	1/95

As this sample shows, the trend is for many of the towns to have a 1996 population that exceeds, sometimes by a very considerable margin, the estimated 2010 population.

While the CAC does not expect the population estimates used for ridership projections to precisely track the actual population, the CAC is very concerned about the extent to which the population estimates lag behind actual population growth.

The significant implication of this lag is that the ridership projections, and consequently the traffic analysis and other impact analyses that are based upon the ridership projections significantly understate the impacts. In particular:

- With actual ridership significantly greater than projected, some—and perhaps many—traffic conditions that the FEIR shows to be not degraded by the addition of commuter rail traffic will in fact be degraded to the point where mitigation would be appropriate and required.
- With increased ridership, demand for parking will be greater.
- With ridership greater than projected, a greater number of automobiles will be removed from the roads, resulting in a larger reduction of vehicle emissions.

The CAC considers the use of such unrealistic population estimates to be a significant flaw in this environmental impact analysis. This is an issue not only for this FEIR, but also for the March 1996 FEIR and the regional station study, all of which are based upon the badly flawed population estimates.

Without updated ridership projections based upon more realistic population figures, the comments and concerns of the communities, relative to traffic impacts, should be given greater weight, and traffic situations where the addition of commuter rail traffic comes fairly close to degrading the level of service should be presumed to actually degrade the level of service.

3. Traffic Analysis

The CAC believes the traffic analysis done for this environmental impact review to be inadequately documented. In particular, the report should document the volume-to-capacity ratios for the roadways studied, for all scenarios.

The volume/capacity ratio would give reviewers a much better understanding of how close, or how far away, this project comes to "breaking" the LOS at particular points. All we have now is the conclusion that it is not "broken" by this project. But we don't know how close it is to the breaking point.

Particularly in light of the badly flawed population estimates described above, it is important for the public to know whether a modest increase in traffic would bring about a degradation in LOS.

4. Reverse Commute

Section 3.2 discusses ridership, and dismisses the reverse commute from further consideration, based on the assumption that there is little potential for a reverse commute into Worcester.

The CAC notes that there is a great deal of commercial and industrial development currently taking place or planned for the Route 9 corridor in Southborough and Framingham and along Routes 495 and 85 in Marlborough. The MetroWest Growth Management Committee reports that many employers or potential employers in this area have expressed high interest in the potential for employees to commute from the Boston area to this area via commuter rail.

With these developments in mind, the CAC believes that the potential for reverse commute with the Worcester Commuter Rail Extension is significantly greater than thought by the project proponent.

5. Framingham Issues

Ridership

The FEIR expresses, in section 7.1 and elsewhere, the belief that when the Ashland station becomes operational, ridership at the Framingham station will be reduced considerably. The Framingham station experienced a significant increase in ridership when interim Worcester service was initiated, largely because interim service introduced two express trains from Framingham to Boston.

The CAC is skeptical about the projected reduction in Framingham-boarding ridership due to riders boarding at Ashland. There are strong indications from Framingham that there is considerable pent-up demand for parking at the Framingham station. The parking garage is generally full, and Framingham police report many commuter rail-related illegal parking citations. Framingham officials frequently get inquiries about additional parking at the station. Taken together, these indicators strongly suggest that there will be an ample supply of commuter rail passengers to take the place of those who will board at Ashland.

Further, Framingham is interested in promoting the use of commuter rail. Numerous benefits accrue from increasing commuter rail ridership, reducing automobile congestion on the streets of Framingham, on the Turnpike, and on the Central Artery, and reducing air pollution from automobiles. It is entirely consistent with the objectives of this project to assume greater ridership due to the many benefits of rail service.

Alternative Access

In addition, Framingham has expressed an interest in making available alternative means of accessing the commuter rail. A number of intermodal connections could be made available, including bicycle access (facilitated by bike paths and lockers), and shuttle service to various areas of Framingham (similar to, or in conjunction with, the Framingham Lift). The CAC suggests that the MBTA work with Framingham to maximize the value of the Framingham service in the ways outlined here.

Congestion

A major adverse impact of increase commuter rail service in Framingham is the additional congestion created by trains stopping North-South traffic through downtown. The added congestion creates a less desirable economic climate, increases air pollution, and adds to the general sense of "blight." Framingham officials are seriously addressing these issues, but all involved parties need to work together. The MBTA is a major influence on downtown Framingham, and the MBTA should work with the Town to maximize the use of commuter rail while minimizing the impacts of traffic congestion.

6. Grafton

This FEIR mentions one case where a traffic impact becomes significant enough to require mitigation in Grafton. Traffic analysis, taking into consideration the elimination of the Millbury station, showed a significant degradation in the area known locally as Quinsigamond Corner. The MBTA proposes to mitigate this situation by reconfiguring and signalizing the intersection of Routes 122 and 140 at Quinsigamond Corner, and tucked away in an appendix (the draft Section 61 finding) is a note that Bridge Street will become one-way westbound. This is a point easily missed by readers of the FEIR, but it will come as quite a rude shock to the many Grafton residents (and non-residents) who regularly take Bridge Street eastbound. For some of them, the signalized intersection will be an improvement, but for others—particularly those patronizing the restaurant on Bridge Street—it will be a major inconvenience.

7. Architectural Access Board Issue

While the case has yet to be resolved, the CAC is concerned about the possible impact of a ruling that is, in the end, not favorable to the MBTA's current plans for these stations. A ruling that requires full-length high platforms has the potential to lead to significant additional environmental impacts, in the form of wetland alterations and other impacts of additional land takings, additional track construction, and so on. Could these additional impacts be so great as to reopen much of the EIR process, in effect?

Alternatively, such a ruling might well result in the complete elimination of one, or all, of these stations. In that case, we lose all the environmental benefits of this project.

In either case, it seems, any AAB ruling that requires significant modification of the current project design is likely to have significant environmental impacts. How will these impacts be reviewed? How will they be mitigated?

Worcester Commuter Rail Extension Project
Citizens Advisory Committee

FEB - 3 1997
By

Date January 30, 1997

To Secretary of Environmental Affairs

From Citizens Advisory Committee

Subject Additional CAC Comments on Third FEIR (Westboro, Southboro, Ashland), EOEA #9154

Following are additional CAC comments on the Westboro, Southboro, and Ashland Final Environmental Impact Report (FEIR) for the Worcester Commuter Rail Extension Project, submitted for publication as part of the FEIR.

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8. Ashland Station

The Ashland CAC members spent many hours reviewing and discussing the FEIR, attending CAC meetings, and meeting with the Ashland Board of Selectmen to discuss the proposed station. They understand that the station is an important link in the overall service improvements and that a significant number of its users will be from other communities. They have questioned whether the demand for service may exceed the MBTA forecasts.

Ashland's primary concern is the potential adverse impact the morning and evening traffic will have on Ashland's streets, especially in those areas that are already congested, and the impact that traffic growth will have on pedestrians in the area. This raises the concern that Ashland may not, in fact, be reasonably able to accommodate 700 parking spaces at the station.

The CAC wishes to highlight the following specific points relative to the Ashland station:

- The design, land acquisition, and permits should accommodate the 700 spaces originally planned, but the MBTA should initially construct only 250 spaces in the south lot and 200 spaces in the north, for a total of 450 spaces, with the understanding that in the future, if it is mutually agreed by the MBTA and the Ashland Board of Selectmen that demand for 700 spaces exists and traffic conditions existing at that time permit, expansion of the south parking lot will be considered.
- All the mitigation that has been proposed for the full buildout (700 spaces) should be provided for the initial reduced-scale facility.
- The access road to the south lot should be appropriate in design and construction to provide access to potential new growth in this area, and a sidewalk should be constructed along the access road to provide safety for walkers from the area.
- Sidewalks should also be provided along the new High Street bridge over the railroad. The FEIR shows that the MBTA understands the need for sidewalks in the area near the north lot, but these additional sidewalks are also required.
- The information provided in the FEIR is old. It should be brought up to date (see also CAC Comment #2).
- An archaeological study was conducted at the station location. It should be expanded to include the access road, as there are known native American sites in this area.

RESPONSES TO CAC JANUARY 28, 1997 COMMENTS

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Introduction

The MBTA appreciates the dedication and hard work of the Worcester Commuter Rail Citizens Advisory Committee (CAC) to date which has led to the detailed and thoughtful comments on the Westborough Station, Southborough Station, Ashland Station FEIR. The CAC questions and concerns are responded to in the following narrative.

1. Inconsistencies Between Text and Response to Comments

Inconsistencies uncovered by MBTA and CAC review of the draft document have been corrected.

2. Population Estimates

The population estimates contained in Section 2.0 of the March 1996 FEIR were presented to provide an historical perspective of the project and were taken directly from the Feasibility Study published in January 1990. These estimates, as stated in the March 1996 FEIR, were developed using 1980 Census data.

The final ridership estimates which appear in the March 1996 FEIR are not based on the 2010 population estimates shown in the 1990 Feasibility Study.

When the 1990 U.S. census data became available, it was compared with the 1987 estimated population shown in the 1990 Feasibility Study. Upon comparison, several discrepancies were found, which lead CTPS to believe that the 1987 estimated population may have been under-estimated. Therefore, it was decided to pivot off of the official 1990 U.S. Census Journey-to-Work trip data as a starting point and developed the future projections based on that. In simple terms, the method consisted of applying the work trip growth rate between 1987 and 2010 as estimated in the feasibility study to the 1990 Census based work trips from the Worcester Corridor to downtown Boston and East Cambridge. The implications of this correction is that the revised future projections of work trips would correspond to a

population estimate that would be greater than what was assumed in the 1990 Feasibility Study.

The 1990 Feasibility Study assumed aggressive growth rates in the Boston bound work trips from the study area between 1987 and 2010, almost a 50% increase. The final ridership estimates used in the FEIR are also based on aggressive growth rates (51%). Therefore, CTPS considers the estimates reasonable.

According to the CTPS Data Resources Group, the methods used in collecting demographic information by the towns and cities differ greatly from the U.S. Census. Therefore, almost always, there is a noticeable discrepancy between the town or city census data and the U.S. Census data. For this reason, it is improper to compare the U.S. Census data for a particular year (say, 1990) with town or city census data for a different year, in this case 1996. Unless one-to-one comparison of the town census data for 1990 or 1991 and the 1990 U.S. Census is made, it is difficult to verify the accuracy or validity of the 1996 town census data.

Another important point to keep in mind is that a significant increase in a town's population does not necessarily mean a significant increase in the number of Boston bound trips from that town. The total number of projected employment in downtown Boston is basically what controls how many trips would be attracted to this corridor. The downtown Boston employment projections used in this study were taken directly out of the Central Artery Transportation Project.

For all the reasons mentioned above, CTPS considers it's ridership projections reasonable. CTPS models projected roughly 385 boardings per day at Worcester in 1996 for an alternative involving the elimination of Millbury Station. We can safely compare this alternative to the existing condition. A count taken by the MBTA in March 1996 indicated roughly 400 persons boarding at Worcester per day. As can be seen, the projections were quite accurate.

3. Traffic Analysis

In the EIR documents, the text and tables which report the results of the traffic analyses consistently have used level-of-service (LOS) as the measure of performance. A particular value of LOS encompasses a defined range of volume-to-capacity ratios.

For most of the intersections and roadway segments analyzed, commuter rail station traffic represents increases of only a small percentage over existing conditions, typically in the range of 1 to 3 percent. The effect on the mathematical value of the v/c ratio would be similar. For "real world" situations, a small change in v/c ratio has no discernable impact on the quality of traffic service which is represented by the

LOS rating. Where station generated traffic results in a large increase in volume, the LOS was affected, and mitigation has been proposed.

If in fact the population growth (and resultant increase in background traffic) has been underestimated, the added station traffic would represent an even smaller proportion of total traffic, and, in terms of LOS degradation, the effects of station traffic would be less than those identified in the EIR analyses.

4. Reverse Commute

The MBTA has previously indicated that reverse commute is typically a fairly small component of the commuter rail system ridership. In this case, the CAC and MetroWest Growth Management have indicated a stronger than average reverse commute. The MBTA will monitor this issue. However, the MBTA does not plan to modify currently proposed schedules until stronger indicators are present.

5. Framingham Issues

The MBTA understands the ridership concerns raised by CAC. However, the MBTA believes, in accordance with ridership projections by CTPS, that opening new stations west of Framingham will reduce ridership and related parking pressures at Framingham significantly. The situation will continue to be monitored using regular train audits.

The MBTA has pledged to continue to interface with the town to facilitate resolution of Framingham's concerns with ridership, parking, and downtown traffic impacts.

6. Grafton

The mitigation proposed for the Route 132/Route 140 intersection will not change the current configuration of Bridge Street. The Draft Section 61 Finding has been edited to remove the reference to one way operation.

7. Architectural Access Board Issue

The MBTA is confident this issue can be resolved outside the EIR process. In the event major environmental changes are required, the MBTA would file a Notice of Project Change and fulfill any requirements ordered by MEPA.

8. Ashland Station

The MBTA understands the concerns raised by the CAC regarding parking and associated mitigation and, in this FEIR, has requested the Secretary to express her views on the subject.

The MBTA is continuing to discuss the access driveway into the south lot with the Town. At this time, sidewalks are not included. The archaeological study at Ashland did include the access driveway. No significant historic or prehistoric resources were recovered in either the station site or the access driveway area.

Sidewalks along the new High Street Bridge are included as part of the MHD bridge reconstruction project.

APPENDIX B

Regional Station Feasibility Study (Executive Summary)

EXECUTIVE SUMMARY

This study responds to the General Court's requirement in Chapter 273, Section 2H, of the Acts of 1994 to present an examination of the feasibility of a regional station near Interstate Routes 90 and 495 as part of the Worcester commuter railroad line service.

I. RIDERSHIP PROJECTIONS FOR A REGIONAL STATION

Because of their importance to this study, new ridership analyses for a regional station were prepared by the Commonwealth's Central Transportation Planning Staff. These ridership analyses reflect alternative combinations of stations along the Worcester Commuter Rail line. They reflect comments from local residents and elected officials as to options to be explored. The options that have been examined are as follows:

Option 1: No regional station. Stations at all other locations in the DEIR, including the Smith Valve site.

Option 2: No Smith Valve station or regional station. Stations at all other locations.

Option 3: No Smith Valve station. Stations at all other locations, including the regional station.

Option 4: No Smith Valve station or Southborough station. Stations at all other locations, including the regional station.

Option 5: No Smith Valve station or Ashland station. Stations at all other locations, including the regional station.

Option 6: No Smith Valve station, Southborough station, or Ashland station. Stations at all other locations, including the regional station.

Option 7: No Smith Valve station, Southborough station, or regional station. Stations at all other locations.

Option 8: No Smith Valve station, Southborough station, Ashland station, or regional station. Stations at all other locations.

For purposes of analysis, the future ridership on the Worcester Commuter Rail Line has been estimated for the years 1996, 2001, and 2011. The full report contains results for all three years; only 2011 figures are summarized here. Depending on the combinations of stations that are built, the results show that

- Total ridership on the line in the year 2011 will range from 2,157 to 3,493 *without* a regional station and from 3,069 to 3,681 *with* a regional station. CTPS has indicated a threshold demand of 3,250 (including Framingham) that must be met at the intermediate stations.

- Total ridership at the regional station reflects the attractiveness of other nearby stations as well as a limited number of new riders who are attracted because of the new station.

- Depending on the option, the regional station would handle 813–1,168 riders in 2011; thus, a capacity of 1,000 cars was selected as the minimum size for the parking facility.

In each ridership projection, Marlborough contributes a large share of traffic to the regional station, ranging from 25 to 30 percent of total ridership. The proportion of traffic from Marlborough also tends to be high in the local station options for Westborough and Southborough. After Marlborough, the next highest contributor towns for regional station ridership are Westborough, Milford, Hopkinton, Upton, and Northborough.

It is important to note that the individual regional station sites are so close to one another that distinctions between them in terms of attracting ridership were extremely difficult to find. For that reason, the ridership of a regional station is assumed to be constant, irrespective of the regional station site that is being examined.

II. CRITERIA FOR SELECTING A STATION SITE

Criteria for selecting a site for a regional station are drawn from prior studies and supplemented by issues that are known to be of concern to local residents. At an August 30, 1995, meeting at Westborough High School, community residents added criteria to the list. The resulting list of criteria is summarized below.

Site Characteristics
- Capacity of site (1,000-car minimum)
- Site condition
- Rail/parking relationship
- Site security
- Property takings
- Future expansion

Traffic access and impacts
- Regional impact
- Local roads
- Ease of access from roadway and expressway network
- Existing infrastructure/ability of local roads to handle the traffic
- Secondary road access with relatively close connections to regional expressways
- Accommodation of traffic volumes with minimum adverse impacts
- Accommodation of pedestrian and bicycle users

Environmental Impacts
- Replication of wetlands or floodplains required
- Aquifer protection
- Endangered species
- Air quality
- Archeological or historic sites
- Noise and vibration

Aesthetics
Hazardous materials
Site proximity to sensitive areas such as wetlands or wildlife habitats

Implementation
Construction impacts
Regulatory issues

Economic impacts
Effects on nearby development
Potential for future development
Effect on local tax base
Employment loss/gain
Socioeconomic
Costs of construction and land acquisition
Cost effectiveness

III. ALTERNATIVE SITES FOR A REGIONAL STATION

Possible sites for a regional station are shown in **Figure 8** on page 25. Sites examined in prior studies include sites on the Conrail property, the Cumberland Farms property (both the parking area and the building), and the Fruit Street site. In this study, three additional sites were added: one at the High Voltage company site, on land adjacent to the I–495 overpass above the rail line; another at the Southborough Rod and Gun Club site, and a third on air rights above I–495 near the High Voltage site. The resulting list of sites is as follows:

1. Conrail
2. High Voltage Corporation
3. I–495 Air Rights
4. Cumberland Farms Parking Area
5. Cumberland Farms Building
6. Fruit Street
7. Southborough Rod and Gun Club site

Each site was examined using the site selection criteria outlined above. A preliminary layout of each site as a regional station was prepared, and the impacts of each station were examined. A brief discussion of each site follows.

IV. SITE EVALUATION

A summary table (**Table 10** on pages 91 and 92) has been prepared as a brief review of the evaluation criteria as applied to each of the alternative station sites. This table summarizes the most pertinent points about each site with regard to the evaluation criteria established by the MBTA with the help of community residents.

First, while several sites can accommodate an ultimate goal of parking 1,000 cars, several sites (High Voltage, Cumberland Farms Parking Area, Fruit Street, and Southborough Rod and Gun Club) are not able to meet that goal without building a parking structure, due to wetlands constraints or site configuration that would require excessive walking distances from cars to the trains. Nearly all of the sites are adjacent to the Area of Critical Environmental Concern; constructing a station on any of the sites will require extreme care in design and in construction mitigation procedures. At least two sites (Conrail and Cumberland Farms Building) require displacement of existing business enterprises. These displacements could be complex and costly, aside from the question of the desirability of removing the enterprises from the local tax rolls and the potential impacts on the region's or the state's economy. In the case of Conrail, a suitable relocation site may not be feasible.

The above considerations affect regional station costs. Property acquisition and construction cost estimates for a regional station at any of these sites range from $15,400,000 to $70,000,000, exclusive of potential Conrail relocation costs. Each cost estimate should be viewed in the context of the total project cost, which is estimated at $80,000,000 for construction and $37,000,000 for rolling stock. These cost estimates should also be considered in terms of the numbers of riders boarding at the regional station, compared with the numbers boarding at other community stations.

"Annualized costs per rider" figures were developed as a cost-effectiveness measure. This measure simply compares annualized station site costs (assuming 30-year bonds) to annualized ridership for each scenario. **Table 11** on page 94 summarizes ridership and annualized cost per rider for each regional station alternative as compared to each of the overall intermediate station combination options. As shown in the table, these cost-per-rider measures vary from a low of $0.51 for a "No Ashland, Southborough, Westborough, or regional station" scenario to a high of $3.26 for the "No Ashland or Southborough with I–495 Air Rights garage." It is interesting to note that neither the highest nor lowest scenarios yields desired ridership levels of 3,250 or more, based on demand analysis. When all scenarios are compared to one another, the MBTA's preferred option of all intermediate stations and no regional station is reasonable in terms of ridership and cost-effectiveness, as well as equity in terms of access and burden-sharing. As shown in **Table 11,** all scenarios without a regional station are lower in annualized cost per rider than the cheapest scenario with a regional station. In terms of ridership, the best scenarios with a regional station are not cost-competitive with the MBTA's preferred option; all the most cost-competitive scenarios with a regional station involve dropping Ashland and Southborough and thereby shifting traffic from these station areas to the regional station area.

Cost effectiveness is very important to the MBTA. Community people emphasized additional criteria, including

- residential takings;
- pedestrian and bicycle safety;
- adequate emergency access;
- sufficient utilities and public services (fire protection, water supply);
- aquifer protection;
- existing infrastructure/ability of local roads to handle the traffic;
- pre-existing parking;
- endangered species; and
- regional impact.

The following analysis summarizes these points with respect to each of the sites:

- Homes are not taken at any site; in prior studies, homes were taken at the Fruit Street site. In this study no homes are taken at the Fruit Street site; however, this results in a lower parking capacity within the available land, unless a garage is built.

- Pedestrian and bicycle safety can be accomplished at the station sites and on many of the access roadways leading into the sites. Emergency access is best at the stations closer to Westborough; Fruit Street and the Southborough Rod and Gun Club, located at the town boundaries of three towns, are particularly inaccessible in cases of emergency.

- All sites have utility connections except the Southborough Rod and Gun Club site.

- Aquifer protection does not appear to be a problem at any of the sites.

- Local roads are capable of handling much of the projected traffic, although widening of Washington Street, intersection improvements at Flanders Road/Connector Road, and rebuilding of the Route 9 interchange serving Connector Road would be necessary to accommodate "worst case" (Option 6) volumes. The residential portions of both Washington Street and Flanders Road are vulnerable, as they are at present, to increasing levels of traffic. In general, traffic impacts are similar for all the sites, since they are so close together. Mitigation is thus needed at every site.

- Pre-existing parking is available at three of the sites: Conrail and Cumberland Farms Parking Area have paved parking areas. Unpaved parking is available at Fruit Street but would probably require upgrading as well as expansion.

- Endangered species may be affected by proposals at the High Voltage, I–495 Air Rights, and Southborough Rod and Gun Club sites.

- Regional impact is derived from traffic attracted to the site. For many of the station combinations CTPS analyzed, traffic would be diverted from other station sites along the commuter rail line. And, for all other combinations that maximize ridership, new traffic is attracted to the site. Overall, the MBTA's preferred option of all intermediate stations and no regional station provides the most equitable distribution of station traffic among the study area towns.

V. FEASIBILITY ISSUES

The following summaries encapsulate the major feasibility issues raised by this study at each proposed regional station location. They address concerns raised by the community and the concerns of the MBTA regarding cost effectiveness. Given the fact that none of the sites meets all the criteria identified by the community and the MBTA, the study's findings lead to the conclusion that a regional station on the Worcester commuter rail line is not feasible at any of the locations examined.

A. *The Conrail Site*

Siting a regional station here would require taking a major portion of Conrail's parking area. There is not room for both a regional station and Conrail's operation. Expansion is restricted by the ACEC that surrounds the site on three sides. Therefore, in addition to taking the property, Conrail's operations would have to be relocated. It would be extremely difficult to find a suitable site for the relocation of Conrail. If a site is found, the cost would be prohibitive. There would also be a loss of jobs and diminished tax base.

B. *High Voltage Site*

This site would require a garage to meet the 1,000-car requirement, since there is only room for 600 cars in surface parking. There are environmental constraints, with wetlands adjacent to the parking area. In addition, in order to avoid major impacts on rail operations, adjustments to existing rail sidings adjacent to the site would have to be made—which would require the approval of Conrail.

C. *I–495 Air Rights*

Cost is clearly the overriding issue with this location, with a total construction cost of $70 million. There are environmental constraints on both sides of the highway, which add to the construction problems. In addition, construction of an interchange would require negotiations with and approval of the Federal Highway Administration, due to the short distance between interchanges. Construction at this site would require approval of Conrail because adjustments to existing rail sidings would have to be made. Takings of some property on either side of the highway might also be required.

D. *Cumberland Farms Parking Area*

At this site there is space for surface parking for 600 cars in a long and narrow site with long walking distances. Therefore, a garage would be necessary to meet the 1,000-space capacity requirement. Expansion on the surface is also constrained by the adjacent ACEC. In addition, to avoid major impacts on rail operations, adjustments to existing rail sidings adjacent to the site would have to be made, requiring approval of Conrail.

E. *Cumberland Farms Building*

To accommodate a regional station at this site, a portion of the Cumberland Farms building would have to be demolished. Accomplishing this without affecting the rest of the building's operations is very difficult; therefore, the issue of taking the entire building must be included in the analysis for this site. These factors make the cost high and would have a serious impact on the economy of the area with a loss of jobs and tax base.

F. *Fruit Street*

This site is adjacent to existing homes and could accommodate only 500 cars on the surface unless homes were taken. Thus, a garage would be necessary to meet the 1,000-space capacity requirement. There would be some displacement of existing industry, resulting in job loss and a diminished tax base. In addition, the site is in a floodplain.

G. *Southborough Rod and Gun Club*

This site is bisected by the Sudbury River and located within two towns. The station site is in Westborough, and the parking area is in Hopkinton. Environmental constraints prevent locating the parking close to the platform. The site is adjacent to the Sudbury River floodplain, which impacts siting a station at this location. Pedestrian access from the parking area to the platform would require construction of a pedestrian bridge, which would increase the walk to the platform to a distance that exceeds the MBTA's requirements for station access.

Table 10. SUMMARY OF CRITERIA APPLIED TO SITES

Site Selection Criteria	Alternative Regional Station Sites						
	Conrail	High Voltage	I-495 Air Rights	Cumb. Farms Parking Area	Cumb. Farms Building Are	Fruit Street	Southboro Rod & Gun Club
SITE CHARACTERISTICS							
Capacity of site							
surface lot	1,000	600	0	600	1,000	500	500
structure	0	400	1,000	400	0	500	500
730' platform, both sides	yes	yes	yes	yes	yes	yes	yes
Pedestrian facilities	yes	yes	yes	yes	yes	yes	yes
Dropoff facilities	yes	yes	yes	yes	yes	yes	yes
Site condition							
Rail geometry	good	good	good	good	good	good	good
Extensive grading needed	no	yes	yes	no	yes	no	yes
Utilities	yes	yes	yes	yes	yes	yes	no
Rail/parking relationship							
Ease of access, parking to train	good	good	good	good	good	good	good
Ease of access, disabilities	good	good	good	good	good	good	good
Effects on railroad operations	some	some	little	some	some	little	little
Site security							
High visibility	yes	yes	no	yes	yes	yes	v
Lighting	yes	yes	yes	yes	yes	yes	
Emergency telephones	yes	yes	yes	yes	yes	yes	
Fire & police protection	yes	yes	yes	yes	yes		
Emergency access routes	1	1	2	1	1		
Properties involved							
Number of parcels	1	1	1 or 2	1	1		
Residences to be acquired	0	0	0	0	0		
Environmental impacts	yes	yes	yes	yes	yes		

Table 10, continued

Site Selection Criteria	Alternative Regional Station Sites						
	Conrail	High Voltage	I-495 Air Rights	Cumb. Farms Parking Area	Cumb. Farms Building Are	Fruit Street	Southboro Rod & Gun Club
TRAFFIC ACCESS/IMPACTS							
Distance from Route 9 interchange	2.7 mi.	2.7 mi.	.3 mi.	3.1 mi.	3.1 mi.	4.1 mi.	4.3 mi.
Vehicle miles of travel added to local roads *	low	low	least	moderate	moderate	most	most
Mitigation needed	yes	yes	yes	yes	yes	yes	yes
Bicycle/pedestrian access	some	some	some	some	some	some	some
ENVIRONMENTAL IMPACTS							
ACEC	yes	yes	yes	yes	yes	no	no
Sudbury River floodplain	yes	yes	yes	yes	yes	yes	yes
Aquifer proteciton required	no	no	no	no	no	no	no
Endangered species affected	no	yes	yes	no	no	no	yes
Archeological or historic zone	no	yes	yes	no	no	no	yes
Runoff protection required	yes	yes	yes	yes	yes	yes	yes
IMPLEMENTATION							
Construction impacts	yes	yes	yes	yes	yes	yes	yes
Regulatory issues, environment	yes	yes	yes	yes	yes	yes	yes
Regulatory issues, interagency	yes	yes	yes	yes	yes	yes	yes
ECONOMIC IMPACTS							
Effects on nearby development	little	little	some	little	little	some	little
Potential for future development	little	little	some	little	little	some	little
Loss to local tax base	yes	yes	yes	yes	yes	yes	yes
Employment loss	no	no	no	no	no	no	no
Employment gain	some	some	some	some	some	some	some
Construction costs (millions)	$15.00	$20.00	$70.00	$18.00	$13.00	$17.00	$17.00
Acquisition costs (millions) **	$0.36	$0.33	unknown	$0.12	$14.40	$1.35	$0.07
Total costs (millions)	$15.36	$20.33	$70.00	$18.12	$27.40	$18.35	$17.07

* Traffic volumes vary by option (see Tables 6-9) but are the same for all station locations.
** Assessed value. Market value is likely to be higher. Cost excludes relocation.

Table 11. CASES BY 2011 ANNUALIZED COST PER RIDER, SHOWING RIDERSHIP (INCLUDING FRAMINGHAM)

Annualized Cost Per Rider	Scenario	Regional Station	Ridership
$0.51	No Ashland, Southborough, or Westborough	no	2,157
$0.64	No Westborough or Southborough	no	3,267
$0.71	No Ashland	no	3,100
$0.72	No Southborough	no	3,326
$0.74	No Millbury	no	3,493
$0.76	No Westborough	no	3,493
$0.77	No Grafton	no	3,493
$0.92	All Stations	no	3,493
$1.00	No Ashland or Southborough	Conrail	3,069
$1.07	No Ashland or Southborough	Southborough Rod & Gun	3,069
$1.10	No Southborough	Conrail	3,681
$1.11	No Ashland	Conrail	3,253
$1.11	No Ashland or Southborough	Cumberland Farms Parking	3,069
$1.12	No Ashland or Southborough	Fruit Street	3,069
$1.16	No Southborough	Southborough Rod & Gun	3,681
$1.18	No Ashland	Southborough Rod & Gun	3,253
$1.20	No Ashland or Southborough	High Voltage	3,681
$1.20	No Southborough	Cumberland Farms Parking	3,681
$1.21	No Southborough	Fruit Street	3,681
$1.22	No Ashland	Cumberland Farms Parking	3,253
$1.23	No Ashland	Fruit Street	3,253
$1.25	All Stations	Conrail	3,681
$1.27	No Southborough	High Voltage	3,681
$1.31	No Ashland	High Voltage	3,253
$1.31	All Stations	High Voltage	3,681
$1.35	All Stations	Cumberland Farms Parking	3,681
$1.36	All Stations	Fruit Street	3,681

Table 11. CASES BY 2011 ANNUALIZED COST PER RIDER, SHOWING RIDERSHIP (INCLUDING FRAMINGHAM)

Annualized Cost Per Rider	Scenario	Regional Station	Ridership
$1.43	All Stations	High Voltage	3,681
$1.49	No Ashland or Southborough	Cumberland Farms Bldg.	3,069
$1.52	No Southborough	Cumberland Farms Bldg.	3,681
$1.58	No Ashland	Cumberland Farms Bldg.	3,253
$1.67	All Stations	Cumberland Farms Bldg.	3,681
$2.99	No Southborough	I–495 Air Rights	3,681
$3.14	All Stations	I–495 Air Rights	3,681
$3.25	No Ashland	I–495 Air Rights	3,253
$3.26	No Ashland or Southborough	I–495 Air Rights	3,069

APPENDIX C

SECTION 61 FINDINGS

- Railroad Right-of-Way and Layover Facility
- Railroad Operations, Westborough, Southborough, Ashland, Grafton and Framingham Stations

INTRODUCTION

The Section 61 Finding for the Railroad Right-of-Way and Layover Facility submitted to the EOEA as a separate document, was finalized by MBTA on October 4, 1995. A copy is included in Appendix C of this document. The Section 61 Finding for Millbury and Grafton Stations, Railroad Operations, and Selected Activities at the Framingham Station, included in Appendix C of the March 1996 Final EIR, has been retracted upon elimination of the Millbury Station. A new Draft Section 61 Finding for Railroad Operations, Westborough, Southborough, Ashland, Grafton, and Framingham Stations is included in Appendix C of this document. The combination of the above two Section 61 Findings presents all of the proposed mitigation for the Worcester Commuter Rail Extension Project.

SECTION 61 FINDING
by the
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
concerning the
WORCESTER COMMUTER RAIL EXTENSION PROJECT
RAILROAD RIGHT-OF-WAY AND LAYOVER FACILITY
EOEA #9154

October 4, 1995

As required by Massachusetts General Laws, Chapter 30, Section 61, the Massachusetts Bay Transportation Authority (MBTA) has reviewed the environmental effects of the proposed reconstruction of railroad track between Framingham and Worcester and construction of a new train layover facility at Worcester. Following upon that review, the MBTA finds below that all feasible measures have been taken first to avoid and then to minimize those effects.

The proposed work consists of the replacement of seven miles of abandoned second track and the upgrade of four miles of substandard second track between Westborough and Worcester, the construction of a permanent layover facility adjacent to the existing Amtrak Station in Worcester, and the construction of 1.4 miles of new storage track west of Union Station in Worcester to replace the storage capacity for which ConRail now uses a portion of the four miles of second track proposed to be upgraded and returned to active line haul use. The project will result in continuous two track service between Framingham and Worcester, supporting the restoration of full commuter rail service in 1996.

An Environmental Notification Form (ENF) for the entire Worcester Commuter Rail Extension project was filed with the Secretary of Environmental Affairs on August 17, 1992 and notice of the filing was made in the *Environmental Monitor* on August 24, 1992. With the concurrence of the MBTA, the Secretary issued a Certificate on October 8, 1992 establishing a Special Procedure for a Major and Complicated Project and establishing a Citizens Advisory Committee to assist her in the review of the project. On October 22, 1992, the Secretary issued a Certificate on the ENF establishing the scope for the Environmental Impact Report (EIR).

A Draft EIR on all elements of the proposed project was filed with the Secretary on November 30, 1994 and notice of the filing was made in the *Environmental Monitor* on December 7, 1994. The Secretary issued a Certificate on March 16, 1995 finding the Draft EIR adequate.

A Notice of Project Change was filed with the Secretary on May 12, 1995 requesting that the MBTA be allowed under the Special Procedure to prepare one Final EIR for the track and layover work and a subsequent Final EIR for station location and operation matters. Notice of this request was made in the *Environmental Monitor* on May 23, 1995 and the Secretary concurred with the MBTA request in a Certificate issued on June 22, 1995.

The Final EIR - Railroad Right-of-Way and Layover Facility was filed with the Secretary on July 31, 1995, and notice of the filing was made in the *Environmental Monitor* on August 8, 1995. The Secretary issued a Certificate on September 14, 1995 in which she determined that this first Final EIR was adequate. It is the work described and reviewed in the first Final EIR that is the subject of this Section 61 Finding. The environmental effects of construction of intermediate stations and basic service operations will be the topic of future environmental review under the Special Procedure and of separate Section 61 Findings before they proceed.

The Final EIR - Railroad Right-of-Way and Layover Facility demonstrated that, in the main, the environmental effects of this component of the proposed project are modest and generally amenable to avoidance or mitigation. The following paragraphs describe, by area of effect, the impacts anticipated and the strategies to be employed to limit those impacts.

Noise effects primarily occur at the layover facility, where an increase of about one dBA in the day-night sound level is expected. In order to reduce this effect to the maximum practical extent, the MBTA proposed in the Final EIR to provide wayside electrical power to eliminate the need for overnight idling of locomotives, virtually eliminating this potential noise source. Since the review of the Final EIR, the MBTA also has committed to employ an on-site air compressor system to maintain brake system pressure overnight, reducing morning warm-up idling requirements substantially.

Vibration may affect as many as 19 residences along the rail line between Framingham and Worcester. These effects will be noticeable, but in no case will they even approach the limits at which damage to structures might occur. Following a careful review of available mitigation measures, the MBTA determined that ballast mats and other forms of so-called path control would not be effective against the primary low frequency content of ground borne vibration. Source control, in the form of careful maintenance of MBTA locomotive and passenger car wheels and frequent rail truing and ballast repairs, was found potentially to be effective and a rigorous maintenance program for rolling stock and rail will be adopted. The MBTA proposes further consideration of this point in the upcoming Final EIR review of operations and may adopt additional measures after that review.

Both drainage and wetland effects are minor, given the limited nature of the physical work proposed. Even so, design had as its aim to avoid wetland intrusions to the maximum practical extent, construction controls (such as silt fencing and rapid reseeding) will be in place to limit effects further, and local review under the Wetland Protection Act and local bylaws will assure that high performance standards are adopted.

None of the historic structures inventoried as part of the Draft EIR will be affected in any way by the railroad right-of-way and layover facility construction. A careful archaeological survey has been carried out along the slopes to be regraded and other areas to be disturbed as part of this component of the project and no archaeological resources were discovered. On the one point of remaining concern--fencing to be installed in three areas with some potential for archaeological resources--the MBTA proposes to invite the Massachusetts Historical Commission (MHC) to join with the MBTA consultant to monitor the drilling of fence post holes. This may reveal the location of resources of interest to the MHC.

Standard, careful construction practices will be used for all work on this component of the project and, when combined with the specific mitigation actions described above, will limit both short and long term negative environmental effects.

For these reasons, the Massachusetts Bay Transportation Authority finds, as required by Massachusetts General Laws, Chapter 30, Section 61, that all feasible measures have been taken to avoid and minimize the environmental impacts of the Railroad Right-of-Way and Layover Facility component of the Worcester Commuter Rail Extension Project.

FOR THE MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
THIS FOURTH DAY OF OCTOBER, 1995

_____

William A. Mitchell, Jr., Esq., General Counsel

[DRAFT] SECTION 61 FINDING
by the
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
concerning the
WORCESTER COMMUTER RAIL EXTENSION PROJECT RAILROAD OPERATIONS, WESTBOROUGH, SOUTHBOROUGH, ASHLAND, GRAFTON AND FRAMINGHAM STATIONS
EOEA #9154

As required by Massachusetts General Laws, Chapter 30, Section 61, the Massachusetts Bay Transportation Authority (MBTA) has reviewed the environmental effects of the proposed stations in Westborough, Southborough and Ashland. In addition, this document also discusses mitigation not previously proposed at the Grafton Station. Mitigation commitments for traffic at the Grafton station are now necessary due to the decision to defer the previously proposed Millbury station under the current program. The impacts of this deferral are analyzed in Section 2.0 of this FEIR and supersede mitigation as proposed in the Millbury and Grafton Stations and Operations draft Section 61 Finding. Following upon that review, the MBTA finds below that all feasible measures first to avoid and then to minimize those effects have been incorporated into the project.

MBTA Mitigation Policy

The MBTA's Mitigation Policy is described in detail in Section 2.8 of this FEIR. For traffic impacts, the general rule is "if the MBTA breaks it, they will fix it." Noise and vibration impacts were evaluated in terms of current and proposed Federal Transit Authority (FTA) criteria, supplemented by the MA Department of Environmental Protection (DEP) noise policy. In addition, noise and vibration mitigation impacts were subject to recently adopted MBTA policy which provides for the expenditure of up to 2% of the project construction cost [for noise and vibration mitigation]. In implementing this policy consideration of the cost effectiveness of noise and vibration mitigation is weighed against the actual relief provided. Impacts to wetland, archaeological, and historic resources in the station designs have been avoided where possible and minimized where avoidance is not possible.

MEPA Chronology

An Environmental Notification Form (ENF) for the entire Worcester Commuter Rail Extension Project was filed with the Secretary of Environmental Affairs on August 17, 1992 and notice of the filing was made in the *Environmental Monitor* on August 24, 1992. With the concurrence of the MBTA, the Secretary issued a Certificate on October 8, 1992 establishing a Special Procedure for a Major and Complicated Project and establishing a Citizens Advisory Committee to assist her in the review of the project. On October

22, 1992, the Secretary issued a Certificate on the ENF establishing the scope for the required Environmental Impact Report (EIR).

A Draft EIR on all elements of the proposed project was filed with the Secretary on November 30, 1994 and notice of the filing was made in the *Environmental Monitor* on December 7, 1994. The Secretary issued a Certificate on March 16, 1995 finding the Draft EIR adequate.

A Notice of Project Change (NPC) was filed with the Secretary on May 12, 1995 requesting that the MBTA be allowed to proceed under the Special Procedure to prepare one Final EIR for the track and layover work and a subsequent Final EIR for station location and operation matters. Notice of this request was made in the *Environmental Monitor* on May 23, 1995, and the Secretary concurred with the MBTA request in a Certificate issued on June 22, 1995.

A Final EIR for the Railroad Right-of-Way and Layover Facility was filed on July 31, 1995 and notice of the filing was made in the *Environmental Monitor* on August 8, 1995. On September 14, 1995, the Secretary issued a Certificate finding this FEIR adequate. The Section 61 Findings (draft) for elements covered in this FEIR is included in appendix C of this document.

Due to unresolved issues pertaining to the proposed Westborough, Southborough, and Ashland Stations, another NPC was filed with MEPA on October 31, 1995 and Noticed in the *Environmental Monitor* on November 7, 1995. This NPC requested permission to address outstanding issues in two separate FEIRs: one to address the Millbury and Grafton Stations and Operations; and another to address station and operation issues in Westborough, Southborough and Ashland. On January 10, 1996, the Secretary issued a Certificate which permitted the MBTA to file two FEIRs for the stations and operations as had been requested.

Also on January 10, 1996, the Secretary issued a Certificate on a Notice of Project Change filed by the MBTA for EOEA #10106, the Framingham Terminal Development. This Certificate permitted the MBTA to undertake several improvements at the Framingham Station primarily to comply with Americans with Disabilities Act (ADA) and, in consultation with the Massachusetts and Framingham Historical Commissions, to restore and relocate the passenger shelter. In addition, the Secretary agreed that the MBTA should address "Phase I" parking issues in Framingham as part of the Worcester Commuter Rail Project's second FEIR.

A Final EIR and draft Section 61 Findings for the Millbury and Grafton Stations and Operations was filed on April 1, 1996 and notice of the filing was made in the *Environmental Monitor* on April 10, 1996. On June 14, 1996, the Secretary issued a Certificate finding this FEIR adequate. This Section 61 Finding supersedes the draft Section 61 Findings for the Millbury and Grafton Stations and Operations.

Railroad Operations/Impacts of Service

Regional Air Quality

The environmental analysis has demonstrated that the introduction of Basic Service to Worcester will result in reductions in emissions of Volatile Organic Compounds (VOC), in Oxides of Nitrogen (NO_x), and in Carbon Monoxide.

Noise

The project will result in noise impacts to seven residential properties along the corridor, five of which are located adjacent to each other on Westborough Street in Grafton. The MBTA, subject to abutter preference, will construct a 50 foot long noise barrier in this location to reduce noise impact from Basic Service train operations.

Vibration

Basic Service to all stations will result in vibration impact to 15 residences. Since the publication of the March 1996 FEIR, which presented updated analyses of noise and vibration effects for basic and interim service, the MBTA has determined that the Millbury station will not be implemented as part of the current project. Train operations will be altered by elimination of stops at Millbury, resulting in higher speeds through the Millbury Station area. Review of the existing land use indicates that no additional noise or vibration impacts will occur as a result of eliminating the Millbury Station stop from the current project. As described in the FEIR for the layover facility and Railroad Right-of-Way, the most effective mitigation for vibration impacts is proper maintenance of rolling stock.

Archaeological and Historical

The MBTA and Massachusetts Historic Commission (MHC) have agreed to abide by Memorandum of Agreement (MOA) to complete the

outstanding work and to guide the process of avoidance, minimization and mitigation of impacts on archaeological and historic resources. A draft MOA was included in Appendix H of the Millbury, Grafton FEIR. The complete report on the Westborough, Southborough and Ashland Stations is in progress.

The presentation of historic properties/sites for the Westborough, Southborough, and Ashland Stations are in Sections 5.6, 6.6, and 7.6, respectively, of this document.

Westborough Station

Traffic

The traffic analyses of roads and intersections within the Westborough study area were reviewed to identify locations which may require mitigation in accordance with the MBTA Mitigation Policy. Traffic generated by the proposed commuter rail station will not cause any location within the Westborough study area to deteriorate from an acceptable level of service to an unacceptable level of service.

Wetlands

The station parking lot has been configured to minimize wetland impacts to the fullest extent possible. Its footprint will avoid impacting bordering vegetated wetlands entirely, and will only include a portion of the buffer zone to wetland resources to the east. All final design elements will be coordinated with and reviewed by the Westborough Conservation Commission through filings of a Notice of Intent.

Southborough Station

Traffic

The traffic analyses of roads and intersections within the Southborough study area were reviewed to identify locations which may require mitigation in accordance with the MBTA Mitigation Policy.

The MBTA, after mitigation meetings with the Town of Southborough to discuss maintaining the local character of the town center intersection, will study and adjust the signal timing at the intersection of Cordaville Road (Route 85) and Main Street (Route 30). Additional mitigation meetings with the town resulted in an agreement to close Cordaville Road from River Street south to

Southville Road. The River Street/Southville Road intersection mitigation will include new signals and left turn lanes on all four legs. Improvements to the River Street/Southville Road intersection also include land acquisition, drainage improvements, and grading. The Route 85 railroad bridge will be replaced allowing for improved sight distance and a sidewalk linking the north and south sides of the tracks.

Wetlands

A portion of the southerly parking lot will be within the 100 foot wetlands buffer zone and the 200 foot riverfront area of the Sudbury River. A portion of the access road to the south lot and one corner of the southern parking lot will be within an area of bordering land subject to flooding. Compensatory flood storage volume will be provided in accordance with 310 CMR 10.00 for the 6,200± cf volume of floodplain filled by the proposed construction. Coordination with the Southborough Conservation Commission, the Massachusetts Fish and Wildlife Service, and the Sudbury Valley Trustees during the design of the station will ensure that recreational resources are protected or enhanced. Final review of wetlands effects will be accomplished by filing a Notice of Intent with the Southborough Conservation Commission.

Ashland Station

Traffic

The traffic analyses of roads and intersections within the Ashland study area were reviewed to identify locations which may require mitigation in accordance with the MBTA Mitigation Policy.

The MBTA is committed to helping the Town of Ashland to retime its traffic signals to account for the changes in traffic patterns due to the Ashland commuter rail station. In particular, the MBTA will replace the existing traffic signal with a new traffic signal system at the Main Street/Union Street (Route 135) intersection. The new system will have the appropriate equipment to handle the required left-turn phases.

At the proposed south side station access driveway at Union Street, the MBTA will install a new traffic signal system and, if required, a new left-turn lane from the south.

Wetlands

Construction on this site will require a variance from the Wetlands Protection Act, a permit from the Army Corps of Engineers under the Federal 404 program, and a Water Quality Certification from the Department of Environmental Protection. A detailed wetland delineation and assessment plan has been filed as part of the request for determination of applicability in accordance with M.G.L. c. 131 s. 40. A detailed replication plan will be developed as part of the Notice of Intent which will be filed with the Town of Ashland in January, 1997.

Grafton Station

Traffic

The traffic analyses of roads and intersections within the Grafton study area were reviewed, in the absence of the Millbury station, to identify locations which may require mitigation in accordance with the MBTA Mitigation Policy.

With the elimination of the Millbury station, additional patrons from the west and southwest will access the Grafton station via Route 122 from the west. All other access routes to the station will carry the same number of vehicles as previously presented in the March 1996 FEIR. Although no intersections in Grafton qualified for mitigation under the Build All Stations and Millbury & Grafton Only scenarios, mitigation is called for under the proposed scenario which eliminates the Millbury Station. The mitigation proposed, which must be acceptable to the Town of Grafton, would include a new signalized intersection at Route 122/Route 140.

In addition to above mitigation, the Massachusetts Highway Department (MHD) is proposing to install a traffic signal at the Waterville Street/North Main Street intersection. The signalization of this intersection will improve traffic flow for traffic turning from Waterville Street (Route 30) to North Main Street (Route 140), traffic turning from Bridge Street to North Main Street (Route 140) and for southbound through traffic on Route 140 south of Bridge Street. The MBTA is cooperating with the MHD to assure that the traffic signal will be completed prior to the opening of the commuter rail station.

Bridge Reconstruction

The Pine Street bridge adjacent to the station site is eligible for the Massachusetts Highway Department's ongoing program for replacement of functionally obsolete and structurally deficient bridges. Through interagency coordination, the MHD has agreed to schedule design and construction of the Pine Street bridge to be compatible with development of the commuter rail project. Design elements of the bridge project include improved sight distance along Route 30 from the proposed Pine Street intersection, increased Pine Street pavement width, and the provision for a sidewalk from Westborough Road to the station site. The MBTA will cooperate with the MHD to assure that the bridge will be operational within the same timeframe as the Grafton Station.

Wetlands

Station construction in Grafton will require filling of approximately 850 square feet of wetland resources in order to construct the driveway and will include additional alteration of buffer zone. Wetland replication is proposed at greater than 1:1 (i.e., 1300 square feet).

A detention pond is planned to maintain stormwater discharge flows below existing conditions (see Table 7.5-1 in the Grafton, Millbury FEIR). The project will implement Best Management Practices (BMPs) to mitigate any stormwater impacts including (1) a parking lot sweeping program; (2) catch basins equipped with sumps and oil
and grease traps; (3) regular cleaning of catch basins; (4) regular removal of trash and organic debris (leaves, branches, etc.) to both reduce nutrient loadings and keep the stormdrain system functional; and (5) consideration of using alternatives to sodium chloride for de-icing.

Archaeology/Historic

An archaeological investigation of the Grafton Station site has shown that no archaeological resources of significance will be impacted by the station construction. Because the site is located within an historic district listed on the National Register of Historic Places, the MBTA will consult with the MHC regarding the station site plans in accordance with the MOA between these agencies.

Framingham Station

Traffic

The MBTA will mitigate impacts generated by the additional gate closings in Framingham by providing immediate improvements at the two adjacent intersections: Waverly Street/Concord Street and Howard Street/Concord Street. The proposed mitigation will improve the traffic flow through these intersections, and capacity analysis indicates that a reduction in delays will result. In addition to physical improvements at these intersections which were described in detail in Section 8.4 of the FEIR, new parking spaces which will be provided south of Waverly Street will attract riders arriving from the south and west to park south of the track crossing and therefore reducing the number of vehicles crossing the tracks. Vehicles traveling through both intersections will also be reduced, further improving the level of operation on the roadway network near the station.

Construction Impacts

Construction at the station sites will result in short term impacts which are not expected to be significant. Certain phases of construction will experience concentrated deliveries of materials. Similarly, short term, intermittent emission from construction related equipment and site related construction traffic, although no violations of air quality standards are anticipated. Typical measures to minimize fugitive dust will include spraying exposed earth surfaces with water.

Measures to be taken that will minimize impacts of site runoff during construction include limiting the area of earth exposed at any one time and the use of hay bales and silt fences to trap sediments.

Noise and vibration impacts associated with construction activities will also be short term. Impacts can be minimized by limiting working hours to exclude nighttime hours.

Standard, careful construction practices will be used for all work on this component of the project and, when combined with the specific mitigation actions described above, will limit both short and long term negative environmental effects.

For these reasons, the Massachusetts Bay Transportation Authority finds, as required by Massachusetts General Laws, Chapter 30, Section 61, that all feasible measures have been taken to avoid

and minimize the environmental impacts of the proposed stations in Westborough, Southborough and Ashland components of the Worcester Commuter Rail Extension Project.

FOR THE MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
THIS _____ DAY OF _____, 1996

_____
William A. Mitchell, Jr., Esq., General Counsel

APPENDIX D

MBTA General Manager's Letter re: Millbury Station

Massachusetts Bay Transportation Authority

William F. Weld
Governor

Argeo Paul Cellucci
Lieutenant Governor

James J. Kerasiotes
Secretary and MBTA Chairman

Patrick J. Moynihan
General Manager

June 25, 1996

Senator Matthew J. Amorello
State House, Room 314
Boston, MA 02133

Dear Senator Amorello:

Knowing of your continued interest in the Millbury Station, I wanted to update you on the status of the project now that the environmental review for the stations is complete.

In the Final EIR, we proposed stations at the Route 20 entrance to Millbury and another station in Grafton. In the certificate, the Secretary of Environmental Affairs gave us the clearance to build the station at the Route 20 location. Due to great concern expressed by you and by residents in the area, however, we have decided to wait on building any station in Millbury at this time. We will focus our attention on building the Grafton Station as well as completing the environmental review of the stations at Westborough, Southborough and Ashland.

We realize this station location in Millbury has been the subject of local concern. We intend to continue to work with you, local officials and the neighborhood in an attempt to ameliorate these concerns. It is my hope that we will be able to develop a plan that will achieve this result and meet the transportation needs of the Millbury area.

I appreciate your continued support for the Worcester Extension Project.

Sincerely,

Patrick J. Moynihan
General Manager

Massachusetts Bay Transportation Authority, Ten Park Plaza, Boston, MA 02116-3974

APPENDIX E

COMMENT LETTERS ON THE MARCH 1996 FINAL EIR - MILLBURY STATION, GRAFTON STATION, RAILROAD OPERATIONS

Comment Letter No. 1

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Boston, 02202

WILLIAM F. WELD
GOVERNOR
ARGEO PAUL CELLUCCI
LIEUTENANT GOVERNOR
TRUDY COXE
SECRETARY

Tel: (617) 727-9800
Fax: (617) 727-2754

RECEIVED
JUN 20 1996
BY

June 14, 1996

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	:	Worcester Commuter Rail Extension (Millbury, Grafton and Framingham Stations, Railroad Operations)
PROJECT LOCATION	:	Statewide
EOEA NUMBER	:	9154
PROJECT PROPONENT	:	Massachusetts Bay Transportation Authority (MBTA)
DATE NOTICED IN MONITOR	:	April 10, 1996

The Secretary of Environmental Affairs hereby determines that the Final Environmental Impact Report submitted on the above project adequately and properly complies with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

A Special Procedure was developed for the Worcester Commuter Rail Extension Project in October 1992, pursuant to the MEPA regulations' provisions for designation of Major and Complicated projects. A Draft Environmental Impact Report (DEIR) was filed in November 1994 and was certified as adequate in March 1995. By a Certificate dated June 22, 1995, the Special Procedure was amended to permit the filing of two separate Final Environmental Impact Reports (FEIRs). The first FEIR, which looked at issues concerning track and corridor improvements and a permanent layover facility in Worcester, was certified as adequate on September 14, 1995. The second FEIR was to address all remaining issues (including rail operations, station siting and construction, alternatives, ridership, revenue issues, and the feasibility of a regional station) and provide a response to comments on the DEIR and the first FEIR.

A Notice of Project Change was filed by the MBTA in November 1995 that requested permission to address the issues originally planned for inclusion in the second FEIR in two separate FEIRs. This request was prompted by unresolved issues pertaining to final determination of station locations in Ashland,

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Southborough, and Westborough. In addition, in a Notice of Project Change that was submitted on the Framingham Terminal Development (EOEA #10106) on November 30, 1995, the MBTA asked to transfer the discussion of environmental issues associated with that project to the Worcester Commuter Rail Extension project. Both requests were granted in a Certificate issued January 10, 1996.

The current FEIR focuses on environmental impacts associated with the construction and operation of the proposed Millbury and Grafton stations, operation of the Framingham Station and expansion of parking at that location, and the expansion of commuter rail service from the interim level (three round trips per day) to basic service (ten round trips per day). It also addresses remaining issues from (and responds to comments on) the November 1994 Draft EIR, the July 1995 FEIR on track improvements and the Worcester layover facility, the December 1995 Notice of Project Change on the Framingham Terminal Development, and the January 1996 Notice of Project Change as they relate to the Millbury, Grafton and Framingham stations and to basic rail service.

The Final EIR on the Ashland, Southborough and Westborough stations will focus on issues related to construction and operation of commuter rail stations in those communities. It also will address all remaining issues from any of the previous EIR or NPC reviews and respond to comments on the current FEIR.

Millbury and Grafton Stations

The preferred alternative for the Millbury station is located just south of the Worcester city boundary, and would be accessed from Route 20 in Worcester (opposite the "Big Y") by a new 3,000 foot long road.[1] The Grafton station is proposed for a site west of Pine Street and north of Route 30. The Millbury station will have parking for 300 vehicles, with 265 parking spaces at Grafton. Each station will have two 800-foot low level platforms, two 45-foot long raised access platforms for the disabled, a passenger drop-off area, a pedestrian bridge over the tracks, station canopy, site lighting and landscaping, and bicycle racks.

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[1] - The DEIR also looked at an alternative site a few hundred feet away, which would have been accessed from Route 122 in Millbury.

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Issues associated with the Grafton station have been thoroughly addressed, and development of that station appears to have widespread support. In contrast, considerable controversy has arisen concerning the Millbury station, partially due to the relatively late notification of the closest abutting residents in Worcester (at the Flint Pond subdivision) that an access road and station were planned next to their neighborhood.[2] As the Southborough Board of Selectmen points out in its comment letter, many of the concerns expressed by the Worcester abutters to the Millbury station are relevant to all proposed stations for this project (such as concerns about vandalism at parking lots, outsiders coming into a neighborhood, responsibility for policing and emergency response), and the MBTA must be consistent in developing solutions to address them at all stations. I request the MBTA to provide information on these issues in the FEIR on the Ashland, Southborough and Westborough stations. 1

The issues that are within the jurisdiction of this office (i.e. environmental issues), however, have been adequately addressed for the Millbury station in the FEIR.[3] Visual screening and control of lighting at the parking lot are proposed as mitigation, and the MBTA plans to work with the City and neighbors to develop additional measures. A stormwater detention basin is proposed to mitigate impacts of stormwater runoff from the parking lot, along with the implementation of Best Management Practices (sweeping, catch basins with sumps and oil/grease traps). These measures will be finalized in cooperation with the Millbury Conservation Commission.[4] In the FEIR, a traffic signal is proposed at the entrance drive. However, the Massachusetts Highway Department questions whether this signal is warranted,

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[2] - The nearest developed parcel is approximately 150 feet from the edge of the parking lot, with the nearest house about 340 feet away. One undeveloped lot in the subdivision must be acquired by the MBTA to construct the access road.

[3] - The MBTA and the Massachusetts Historical Commission have executed a Memorandum of Agreement (contained in Appendix H of the FEIR) that ensures completion of all historical and archaeological studies before construction begins. I find that agreement to be acceptable to address the MEPA scope. Summary results of all studies conducted under the MOA should be contained in the FEIR on the Ashland, Southborough and Westborough stations. 2

[4] - Parts of the access road and parking lot are within 100 feet of wetlands. No direct wetland impacts are planned.

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3 and plans to work with the proponent to finalize appropriate mitigation at that location. The Final Section 61 Findings must report on the results of all further discussions concerning mitigation, and propose a final mitigation package.

Because of the opposition that has arisen concerning the Millbury station, it is possible that the MBTA will consider going forward with only the Grafton station at this time, especially since the analysis in the FEIR shows that elimination of the Millbury station would not affect total ridership. However, if only the Grafton station is built projected ridership from that location can be expected to double (from approximately 216 to 444) in the short term, in effect creating a regional station. While the community appears willing to accept that scenario[5], the full impacts of an expanded facility at Grafton have not been analyzed, nor have mitigation measures been proposed. In addition, 'overconstruction' of a Grafton station (which would occur if a Millbury station were constructed at a later date) would be inadvisable on both environmental and financial grounds.

4 If the MBTA decides to eliminate the Millbury station from its plans, the FEIR on the Ashland, Westborough and Southborough stations should include a thorough analysis of the impacts of an
5 expanded Grafton station. Similarly, if a different site is proposed for the Millbury station, it also should be evaluated in that document.

The proposed site of the Grafton station currently is owned by the Commonwealth of Massachusetts, Division of Capital Planning and Operations (DCPO) (the FEIR incorrectly stated that transfer of the land had already been accomplished). DCPO has requested that the analysis in the current FEIR serve as environmental documentation for the land transfer. In order to avoid duplicative environmental review by this office, I grant that request, and do not require the filing of an Environmental Notification Form for the land transfer.

Framingham Station

The major issues associated with the Framingham station are

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[5] - The Grafton Board of Selectmen have stated their support for construction of a Grafton station, whether a Millbury station is constructed or not (assuming that traffic mitigation is provided at the Route 140/Route 122/Bridge Street intersection).

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traffic congestion and parking demand/supply. Given the difficulties in resolving these issues completely in a densely developed urban setting, the mitigation measures proposed in the FEIR make considerable progress toward that goal. Nevertheless, continued coordination between the Town and the MBTA will be essential to maximize ridership (and achieve attendant regional air quality benefits) while minimizing adverse local impacts.

While it is understandable that the MBTA wants to delay a decision on the construction of additional parking (beyond the 95 new spaces currently proposed) until the status of the proposed Ashland, Southborough and Westborough stations is resolved, it is clear that there will be excess parking demand at Framingham for at least several more years.[6] Additional measures that can be taken to address short-term parking problems (such as incentives for carpooling to the station, improved pedestrian connections to the Pearl Street garage or use of satellite lots and shuttles) should be seriously considered and developed in coordination with local officials. 6

The FEIR states that discussions between the Town and the MBTA concerning the Framingham Station are continuing. I recommend that forum be used to address the remaining issues concerning the Framingham station that are mentioned in the comment letters from the Framingham Planning Department and the MetroWest Growth Management Committee. These include the provision of a ticket kiosk at the station, a possible MBTA contribution to the rubberizing of the Bishop Street grade crossing, selection of a preferred alternative for mitigation at the Route 135/Route 126 intersection, and integration of station improvements with the Town's streetscape program. The Final Section 61 Findings should report the results of the discussions with the Town and the full mitigation package. 7

Railroad Operations

The FEIR analyzes the regional air quality impacts of the Worcester Commuter Rail Extension project based on the impacts of auto trip diversion to commuter rail, of auto trip diversion on Peak Hour Massachusetts Turnpike Operations and of commuter rail

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[6] - Several commenters suggest that ridership at Framingham is (and will be) higher than described in the FEIR. If this is the case, accompanying parking demand also will be greater than described.

operations (locomotive emissions). It is clear that the project will have positive impacts on regional air quality. With basic service (ten round trips per day), provision of commuter rail to the Worcester, Millbury and Grafton stations alone would result in a daily reduction in volatile organic compounds (VOCs) of 74 kilograms (kg), in oxides of nitrogen (NOx) of 14 kg, and in carbon monoxide (CO) of 800 kg at the end of 1996. If all stations were to be constructed in 1996, reductions would increase to 133 kg for Vocs, 106 kg for NOx and 1384 kg for CO. These numbers decrease slightly by the year 2001, due to projected improvements in automobile pollution controls.

While the benefits of this project are significant, increased rail service also has the potential for adverse impacts, in particular noise and vibration impacts and impacts on local traffic at grade crossings. The FEIR identifies seven residences that will be subject to noise impacts from Basic Service. Five of these properties are clustered near Route 140 in Grafton. The MBTA proposes to construct a 500-foot long noise barrier to mitigate impacts on those homes. No mitigation is proposed for the two remaining homes (in Grafton and Westborough). While provision of a noise barrier in those two locations may not be reasonable given its excessive cost (estimated at $64,000 per location), strong consideration should be given to providing receiver noise control (for example, additional window glazing, weather stripping). 8

Annoyance level vibration impacts are predicted to occur at fifteen residential units if all stations are built, and at 23 units if only Millbury and Grafton stations are built.[7] A variety of vibration mitigation strategies are discussed; however, the analysis finds most of these to be ineffective for mitigating the type of vibration that is generated. Although the MBTA proposes to implement track and equipment maintenance measures to mitigate vibration impacts, it admits that such measures may not completely eliminate vibration impact attributable to this project. The MBTA states that reducing train speeds would "not meet the objectives of the project." It is not made clear why this is so, and that alternative should be considered further. 9

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[7] - Vibration levels are strongly related to train speed. If only Millbury and Grafton stations are built, trains passing through the towns between Grafton and Framingham will be travelling faster in certain areas than they would under the "Build all stations" scenario.

The FEIR examines several options for alleviating the traffic impacts of additional gate closings at Main Street and Cherry Street in Ashland. Structural alternatives (such as grade separations) did not appear to be feasible, because of the extent of impacts resulting from such measures. Some improvements can be achieved through optimization of signal timing; however, afternoon peak hour Level of Service decreases at the Main/Union Street intersection. It is suggested in the FEIR that if and when an Ashland station is constructed vehicle volumes at the impacted intersections may decrease, thereby offsetting the impacts of the gate closings. The MBTA proposes to study this issue further after a location is selected for the Ashland station, and to propose additional mitigation in the EIR covering the Westborough, Southborough and Ashland stations. 10

Financial Feasibility

The MBTA has requested me to find that financial considerations concerning the project, including cost-effectiveness, have undergone sufficient MEPA review. The FEIR states that the financial feasibility of this project has been demonstrated because funds have been authorized by the Legislature for this project; the Boston Metropolitan Planning Organization has determined the overall financial capacity of the MBTA to maintain existing and proposed transit initiatives (including this project); and the project has been included by the Commonwealth in the State Implementation Plan. As review of financial issues under MEPA focuses on their effect on the selection of alternatives and mitigation measures (and consequently on environmental impacts), I find that the analysis provided to date on financial feasibility is adequate to meet MEPA review requirements.

FEIR on Ashland, Southborough and Westborough Stations

The FEIR on the Ashland, Southborough and Westborough stations is the final document that is scheduled to be submitted under the Special Procedure for the Worcester Commuter Rail Extension. That report should address any issues that remain from any of the previous EIR or NPC reviews, respond to comments on the current FEIR and summarize mitigation measures proposed for the entire project. A proposed implementation schedule for each 11

Comment Letter No. 1

mitigation action should be provided. All Section 61 Findings for the project should be included in the FEIR, in Draft or Final form, as appropriate.

June 14, 1996
Date

Trudy Coxe

Comments received : P. Foley, 5/9/96
E. Kelly, 5/10/96
DCPO, 5/13/96
Westborough Board of Selectmen, 5/17/96
J. Bonofiglio, 5/17/96
C. Fenlon, 5/17/96
Flint Pond Residents, 5/17/96
Worcester City Councillor S. Patton, 5/31/96
Worcester City Councillor P. Clancy Jr., 5/31/96
DEP/CERO, 6/3/96 and 5/24/96
Millbury MBTA Advisory Committee, 6/3/96
Grafton Town Adminstrator D. Morgado, 6/4/96
State Representative Paul Kollios, 6/4/96
DFA, 6/4/96
State Senator Matthew J. Amorello, 6/5/96
Worcester OPCD, 6/6/96
MHD, 6/6/96
Ashland Town Manager D. Blois, 6/6/96
Mass. Audubon, 6/6/96
Southborough Planning Board, 6/7/96
Southborough Board of Selectmen, 6/7/96
Metrowest Growth Management, 6/7/96
Framingham Planning Dept., 6/7/96
K.K. Davison, 6/7/96
Boston Environment Dept., 6/7/96
MHD, 6/7/96

TC/JGH/jh

Comment Letter No. 2

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS SENATE
STATE HOUSE BOSTON 02133-1053

SENATOR MATTHEW J. AMORELLO
SECOND WORCESTER DISTRICT
ROOM 314 STATE HOUSE
OFFICE TEL 617-722-1485
HOME TEL 508-839-4369

COMMITTEES
WAYS AND MEANS
TRANSPORTATION
SCIENCE AND TECHNOLOGY
JUDICIARY
CHAIR — REPUBLICAN CAUCUS

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OF ENVIRONMENTAL AFFAIRS

June 5, 1996

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Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

RE: EOEA #9154

Dear ~~Secretary Coxe~~ Trudy:

I am writing to express my conditional support for the final EIR, EOEA # 9154 for Millbury/Grafton submitted by the Massachusetts Bay Transportation Authority. While I fully support the expansion of the MBTA to Central Massachusetts several concerns have been raised by citizens in Worcester regarding the proposed rail station in Millbury.

I respectfully request that no action be taken to build a train station in Millbury until the concerns of the citizens of Worcester are properly resolved. Given that situation, it is my hope that MEPA will approve the final EIR, EOEA # 9154 and move forward on the Grafton train station. (1)

The Town of Grafton Board of Selectmen fully supports the proposal to build a rail station in Grafton regardless of the sighting of a station in the town of Millbury. The presence of the MBTA in Grafton will provide efficient, cost effective and environmentally sound transportation infrastructure from Central Massachusetts to Boston.

I am confident when the MBTA station is completed in Grafton many commuters in the area will choose commuting by train rather than by automobile. The end result will be less emissions and a cleaner environment.

Comment Letter No. 2

Your favorable consideration moving forward with the Grafton MBTA station would be greatly appreciated. In the meantime, if you have any questions concerning this matter please do not hesitate to contact me.

Sincerely,

Matthew J. Amorello
State Senator
Second Worcester District

MJA/bmf

Comment Letter No. 3

The Commonwealth of Massachusetts
HOUSE OF REPRESENTATIVES
STATE HOUSE, BOSTON 02133-1054

PAUL KOLLIOS
REPRESENTATIVE
7TH WORCESTER DISTRICT
AUBURN-MILLBURY-OXFORD-DUDLEY

Chairman, Committee on
Human Services and Elderly Affairs
ROOM 22, STATE HOUSE
TEL. 617-722-2291

JUNE 4, 1996

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Mr. Jan Reitsma, Director
Massachusetts Environmental Policy Administration
Executive Office of Environmental Affairs
100 Cambridge Street, Floor 20
Boston, MA 02202

Dear Mr. Reitsma,

Please accept this letter in favor of the Rt. 20 access road for the proposed commuter rail station in Millbury, as recommended in the Final Environmental Impact Report.

Due to the impacts associated with the Rt. 122 access road, public sentiment in Millbury is more in line with an access road off Rt. 20 in Worcester. While the proximity of the Rt. 122 alternative to the Mass. Pike entrance and Park-and-Ride area would make for a logistically sensible transportation mecca, it would involve the mitigation of significantly more environmental impacts than the Rt. 20 access road. 1

Specifically, the Rt. 122 alternative would require complete reconfiguration of the Rt. 122/Exit 11 intersection, which would include the installation of a double left turn lane from Exit 11 to Rt. 122 westbound. This, in turn, would require more landtakings and business relocation along that road. Separate landtaking is necessary for construction of the access road itself, which will impact a private well and displace wetland resources. Moreover, noise and vibration impacts would occur at several residences.

Conversely, the Rt. 20 access road in Worcester would require only one landtaking, which has already been negotiated. Further, since Rt. 20 is a larger, 4-lane road and can accomodate significantly more traffic than the smaller, 2-lane Rt. 122, there is no need for expensive road reconstruction.

Comment Letter No. 3

Therefore, based on the position expressed by the town of Millbury, and my belief that access via Rt. 20 is much more sensible and less intrusive, I ask that the Rt. 20 alternative be favorably considered.

Sincerely,

PAUL KOLLIOS
STATE REPRESENTATIVE

cc: Millbury Board of Selectmen
Jim Eng, MBTA

PK/ddm

Comment Letter No. 4

The Commonwealth of Massachusetts
Executive Office for Administration and Finance
Division of Capital Planning and Operations
One Ashburton Place
Boston, Massachusetts 02108

WILLIAM F. WELD
GOVERNOR
ARGEO PAUL CELLUCCI
LIEUTENANT GOVERNOR
CHARLES D. BAKER
SECRETARY
LARK JUREV PALERMO
COMMISSIONER

Tel: (617) 727-4050
Fax: (617) 727-5363

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MAY 1 [illegible]
MEPA

May 13, 1996

Mr. Jan Reitsma
Assistant Secretary for Environmental Affairs,
Director, MEPA Unit
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, Massachusetts 02202

Re: EOEA No. 9154/Worcester Commuter Rail Extension Project

Dear Mr. Reitsma:

By this letter, DCPO hereby requests that MEPA include in its review of the Final Environmental Impact Report regarding the above-referenced project the disposition by DCPO to the MBTA of land in Grafton. The land is the proposed site of the Grafton commuter rail station, and consists of approximately five acres of land north of the railroad and west of Pine Street.

Please let me know if you require any further information about this disposition in order to include the disposition in the Certificate of the Secretary of EOEA, so that we may satisfy the requirements of MEPA with regard to the disposition of the land by DCPO to the MBTA. (1)

Very truly yours,

Gina B. Dailey
Associate General Counsel

cc: Jamie Lewis Keith, Assistant Commissioner and General Counsel
Frederick Wells, Project Manager

Comment Letter No. 5

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF FOOD AND AGRICULTURE
LANCASTER REGIONAL FIELD OFFICE
142 OLD COMMON ROAD, LANCASTER, MA 01523 (508) 792-7711 FAX (508) 365-2131

WILLIAM F. WELD
Governor

ARGEO PAUL CELLUCCI
Lt. Governor

TRUDY COXE
Secretary

JONATHAN L. HEALY
Commissioner

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JUN 7 1996
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MEMORANDUM

To: Trudy Coxe, Secretary
Executive Office of Environmental Affairs

Attn: Janet Hutchins, MEPA Unit

From: Marcia Starkey MS

Re: EOEA #9154 Worcester Commuter Rail Extension
Millbury and Grafton

Date: 4 June 1996

The Department has reviewed this Final Environmental Impact Report with respect to agricultural issues. The stations at Millbury and Grafton have been identified as having potential to offset project-induced growth which can adversely affect agricultural resources in these locales. (1)

The response to DFA comments in the FEIR does not reflect the breadth of discussions which the proponent has had with the Department's Bureaus of Land Use and Markets. The MBTA has requested that the Bureau of Markets provide profiles for farmer's markets suited to the Millbury and Grafton stations, as well as identificationn of priority market locations on other MBTA lines. This follows a similar and successful program currently in place at selected service areas on the Massachusetts Turnpike. (2)

Implementation of the initiative proposed by the MBTA would provide the best opportunity to benefit both commuter rail customers and agricultural resources in the project area.

c/Andrew Brennan, MBTA
David Giurleo, Director, Bureau of Markets

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Comment Letter No. 6

Mary Richards

Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Protection
Central Regional Office

William F. Weld
Governor
Argeo Paul Cellucci
Lt. Governor

Trudy Coxe
Secretary
David B. Struhs
Commissioner

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MEMORANDUM
CERO

TO: MARY RICHARDS, MEPA COORDINATOR

THRU: JOHN DESMOND, SECTION CHIEF, WATER SUPPLY

FROM: ANDREA LEMERISE, WATER SUPPLY

DATE: MAY 24, 1996

SUBJECT: EOEA #9154
FINAL ENVIRONMENTAL IMPACT REPORT
MILLBURY STATION, GRAFTON STATION AND RAILROAD OPERATIONS FOR THE WORCESTER COMMUTER RAIL EXTENSION PROJECT

The Department of Environmental Protection, Division of Water Supply, Central Regional Office (the "Division") has reviewed the Final Environmental Impact Report (FEIR) on the Millbury Station, Grafton Station, and Railroad Operations, dated March 1996, for the Worcester Commuter Rail Extension Project, EOEA #9154. This project has received a Major and Complicated designation which has allowed for submittal of three separate FEIRs. The Division would like to offer the following comments on this second FEIR which is currently published in the Environmental Monitor.

In the Division's original comments of March 9, 1995 a few questions were raised relative to identification of all the existing public (and private) water supplies along the Railroad Right-of-Way. The responses to those questions were included in this FEIR along with a copy of the Vegetative Management Plan (VMP) and Yearly Operational Plan (YOP) for Conrail. In review of the responses and these documents supplied, the Division acknowledges that the issues that were originally raised pertain directly to Conrail and not the Mass Bay Transportation Authority nor the Commuter Rail Extension Project it has proposed here. However, the Division feels it is necessary to express a concern it has with the process by which YOPs are approved, since this project brought it to our attention. 1

As was stated in the response to Comment 8-10, the Department of Food and Agriculture coordinates with DEP and DEM to keep the

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Comment Letter No. 6

EOEA #9154 - FEIR #2
Page 2.

list of public water sources and their locations current as well as with local officials for private water supply sources. This coordination occurs during the review process for Vegetative Management Plans. In the case of Conrail, the VMP was approved for a 5 year period. Yearly Operational Plans detail any scheduled activities for the upcoming year and are submitted for review and approval to DFA. DEP and DEM are not involved in the review process for YOPs. Since the DEP is continuously approving new and existing public water supply sources that were not previously registered, the maps, which are approved with the VMP, indicating such "sensitive areas" may be out-dated. No mechanism exists to ensure that all public water supply sources are identified in the Yearly operational Plans. The Department is willing to supply any applicant, upon their request, with an updated list of public water supply sources for those communities for which they have ROWs that they anticipate chemically treating for that year. The Division is of the opinion that the applicant should take the initiative to make this identification process complete.

It should be noted that although copies of the 1995 VMP and YOP for Conrail were included in Appendix E of this FEIR in response to several questions raised about proper identification of public water supply sources as "sensitive areas," the maps, as part of the YOP, were not included in this FEIR. Therefore, the Division cannot be sure that all "sensitive areas" have been properly identified. The Division will comment that the ROW that passes through Grafton's aquifer protection zoning overlay district (Comment 8-20) should be a "limited spray zone." The proposed Westborough station site and ROW within the IWPA for Westborough's Otis wells (Comment 8-22) should be a "limited spray zone." The ROW within the Zone II of Westborough's Andrews St. wells No. 1 & 2 and Wilkinson well (Comment 8-23) should be a "limited spray zone."

A correction should be made to in the 1995 YOP for Conrail, Consolidated Rail Corporation. On Page 5, Section VI Flagging Methods To Designate Sensitive Areas on the ROW, the definition of "limited spray' areas should read "...and between 50 and 100 foot radius around a ~~public~~ [redacted] well, spraying is restricted to one application every other year."

2 Finally, the third FEIR should address the remaining issues raised by the Division (Comments 8-24 through 8-27). It is appropriate that they be addressed in the next FEIR which will cover Ashland, Southborough and Westborough stations.

cc: Dave Terry, Director - DEP - DWS - Boston
Ron Stelline - DEP - DWS - Boston
Jana Leung, DWS - CERO

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Comment Letter No. 7

MASS HIGHWAY William F. Weld Governor | Argeo Paul Cellucci Lieutenant Governor | James J. Kerasiotes Secretary | Laurinda T. Bedingfield Commissioner

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June 6, 1996

Statewide
Worcester Commuter Rail Extension Project
EOEA No. 9154

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OFFICE OF THE SECRETARY
ENVIRONMENTAL AFFAIRS

Ms. Trudy Coxe, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202

Attention: Janet Hutchins, MEPA Unit

Dear Secretary Coxe:

The Massachusetts Highway Department (MHD) has reviewed the Final Environmental Impact Report (FEIR) submitted by the MBTA for the Worcester Commuter Rail Extension Project. The FEIR addresses the impacts of railroad operations and the siting of intermediate stations in Millbury and Grafton. The proposed station in Millbury requires a highway access permit from the MHD.

The site drive for the Millbury station is proposed on the south side of Route 20 in Worcester opposite an existing retail facility. The FEIR proposes to signalize this intersection and coordinate the traffic signals with existing signals located at the adjacent intersection of Route 20 with Sunderland Road/Westboro Street. The reason given for providing traffic signal control is to facilitate left turn movements out of the project during the afternoon hours when commuters return.

The FEIR does not include any traffic volumes or analyses for the adjacent intersection making it difficult to determine whether the two locations can function adequately in a coordinated manner. This issue was the primary reason that traffic signals were not approved at this location during the development of the retail facility. Also missing from the FEIR are plans illustrating the proposed improvements. 1

The FEIR indicates that the AM peak hour of the commuter rail project overlaps that of the adjacent roadway network while the PM peak hour for the project occurs after the roadway peak hour. Although the FEIR does not include build analyses for the site drive intersection without signal control, the results of the no-build scenarios indicate that movements from the existing site drive function at an acceptable level of service during all peak hours except the PM peak hour of Route 20. Although left turn movements exiting the site operate under LOS F conditions during this period, the total approach volume for the hour is less than 10 vehicles.

Comment Letter No. 7

Under build conditions, the intersection can be expected to exhibit operational qualities similar to those encountered under no build conditions. Although site drive exit movements fail during the PM peak hour of the roadway, the total approach volume continues to be minimal with less than 30 vehicles projected. It should be noted that peak hour LOS F conditions are typically encountered by vehicles turning left from minor streets and driveways that intersect high volume commuter routes.

During the PM peak hour of the project, the total volume on the site driveway approach shows a small increase to approximately 80 vehicles. This increase is somewhat offset by a 33% decrease in the volume of Route 20 traffic passing the site during this time period as compared to the peak hour of the roadway.

The FEIR indicates that the location will satisfy traffic signal warrant criteria for the PM peak hour of Route 20 and the PM peak hour of the project. Based on a review of the traffic volume projections, it is clear that the warrants for these periods are met by the volumes of traffic exiting the existing retail facility rather than the commuter rail station. Vehicles leaving the retail facility currently must turn right. If the restriction is retained, the need for traffic signals at this location is diminished. 2

Based on all of the above, the MHD cannot at this time recommend the installation of traffic signal control at this location. The proposed site drive should initially be constructed without traffic signal control. The site drive approach should be constructed to provide two lanes, one for left turn and through movements and one for right turn movements leaving the site. To facilitate future installation of traffic signal control, conduit should be placed beneath the driveway. 3

Once the commuter rail station has been constructed and ridership stabilizes, it would be appropriate to conduct further traffic volume counts and analyses at the site drive intersection and at the adjacent intersection of Route 20 with Sunderland Road/Westboro Street to determine the need for and appropriateness of traffic signal installation. 4

The aforementioned issues can be addressed through discussions with the MBTA during the permitting process. Therefore, the MHD does not believe that further review of the project's traffic impacts at the Millbury station is necessary under the MEPA. The MHD looks forward to working with the MBTA during the development and implementation of this important transportation enhancement project. If you have any questions, please feel free to contact me at (508) 754-7204. 5

Comment Letter No. 7

Ms. Trudy Coxe
page 3
June 6, 1996

Very truly yours,

Peter J. Donohue, P.E.
District #3 Highway Director

PDS/pds

pc: PDS
PSC
Thomas Broderick, Chief Engineer
Charles Sterling, Traffic Engineer
Luisa Paiewonsky, Transportation & Development Programs
Andrew Brennan, MBTA
M.O. File

Comment Letter No. 8

June 7, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202

The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

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ATTN: MEPA Unit

RE: Worcester Commuter Rail Extension Project. MHC #9415. EOEA #9154.

Dear Secretary Coxe:

Staff of the Massachusetts Historical Commission have reviewed the second Final Environmental Impact Report (FEIR) regarding the proposed project referenced above. After review of the FEIR, MHC staff have the following comments.

As noted in the FEIR, a cultural resources survey of the railroad right-of-way was recently completed and the original Area, Building, and Structure Forms were received by the MHC on May 30, 1996. MHC staff are in the process of evaluating this information to determine which properties and structures are eligible for listing in the National Register of Historic Places. MHC staff anticipate that the evaluation process will be completed by the end of June, at which time the MHC would be able to determine what effect the proposed project will have on historic resources.

The draft Memorandum of Agreement (MOA) in Appendix H was previously reviewed by the MHC and is acceptable.

Archaeological investigations of the right-of-way and proposed impacts from the new double track, fencing, drainage improvements, and associated impacts as currently proposed are unlikely to affect any significant archaeological deposits.

MHC is awaiting the results of archaeological investigations that have been conducted for the proposed Millbury and Grafton Stations. MHC understands that a revised permit application (950 CMR 70) for archaeological investigations to be conducted at the proposed Ashland, Westborough, and Southborough stations is being prepared for submittal to the State Archaeologist. The Draft MOA provides a means to implement the archaeological investigations, and allows the continued opportunity to locate, identify, evaluate, and avoid, minimize, or mitigate impacts to significant archaeological resources that may be present at the proposed station sites. MHC looks forward to continued consultation during this review. 1

These comments are provided to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), Massachusetts General Laws, Chapter 9, Sec. 26-27c, as amended by Chapter 254 of the Acts of 1988 (950 CMR 70-71), and MEPA (301 CMR 11). If you have additional questions, please contact Edward L. Bell or Allen Johnson at this office.

Sincerely,

Judith B. McDonough
Executive Director
State Historic Preservation Officer
Massachusetts Historical Commission

cc: Local Historical Commissions: Millbury, Grafton, Ashland, Westborough, Southborough
Andrew Brennan, MBTA
Michael Roberts, Timelines, Inc.

220 Morrissey Boulevard, Boston, Massachusetts 02125 · (617) 727-8470
Fax: (617) 727-5128 TDD: 1-800-392-6090

Comment Letter No. 9

Massachusetts Audubon Society
1996
Celebrating 100 Years of Conservation

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June 6, 1996

Trudy Coxe, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202

Attention: MEPA Unit

Re: **EOEA # 9154, Worcester Commuter Rail Extension, Millbury and Grafton Stations**

Dear Secretary Coxe:

On behalf of the Massachusetts Audubon Society, I submit the following comments on the (second) Final Environmental Impact Report (FEIR) for the above referenced project.

As you know, Massachusetts Audubon is a voluntary association of people, representing 55,000 member households, and dedicated to preserving the biological diversity and water resources of the commonwealth. The Society supports this and other commuter rail projects which seek to improve people's mobility and transportation options through enhancement of existing public transportation infrastructure, while minimizing environmental impacts.

This is the second of three FEIRs for the Worcester commuter rail extension project. The first FEIR covered interim service and work on the railroad right-of-way. This document examines the impacts of the Millbury and Grafton Stations and rail operational issues. The final, third, FEIR will cover the siting of stations in the Southboro/Ashland/Westboro area. The Society offers the following comments for consideration as the Grafton and Millbury station design details are developed and the projects undergo review by the local conservation commissions. While the Society asks that the MBTA respond to these comments on this FEIR in the final FEIR for the Worcester commuter rail project, we do not feel that additional supplemental information is necessary at this time in order for this phase of the project to proceed.

Construction of stations at Millbury and Grafton, and increasing the service level from interim service (3 weekday trains each direction) to Basic Service (10 weekday trains each direction) will enhance significantly the accessibility and utility of this commuter rail service. The Society supports the MBTA's efforts to implement this level of service by the end of 1996, while postponing stations in the Ashland/Southboro/Westboro areas in order to allow for further community involvement in the station siting and design process. This approach provides timely

improvement of the overall service while devoting extra time and effort to resolve environmental, neighborhood, and traffic issues associated with station siting in the Ashland/Southboro/Westboro area.

The following comments are offered on specific aspects of the Millbury and Grafton Station components of the project:

Stormwater Management

The FEIR indicates that detention basins will be constructed as one part of the stormwater management systems at both Millbury and Grafton stations. The plan for the Grafton station shows the general proposed location for the basin. At Millbury, no basin location or design is presented, but there is a commitment in the narrative to include a stormwater management basin and other Best Management Practices such as stilling basins and/or vegetated swales. The Society recommends that the following considerations be incorporated into the design of the stormwater management system for these and all other new or reconstructed MBTA stations.

1 Stormwater management system design should follow the general principle of spreading out runoff and discharging it gradually through vegetated swales, into infiltration areas, or through dispersion across a broad vegetated area rather than concentrating it into one central discharge point. Stormwater basins should be designed not only to manage the hydrologic impacts of creation of impervious surfaces, but also to remove pollutants from runoff generated by station access roads and parking areas. The basins should incorporate water quality improvement features such as sediment forebays and long, shallow flow routes through the basins. Wetland vegetation such as cattails should be established within the basin, so that water will filter slowly through the vegetated area before being discharged. Discharge areas should also be designed to be gradually sloping, and vegetated with grasses or other plants to further slow and filter water. The discharge points should be as far from the edge of natural wetlands or waterways as possible, allowing flow to travel through vegetated upland and/or buffer areas before reaching wetlands. Plans for detention basins should incorporate provisions for future maintenance, such as access for machinery to clean out the stilling basin area. This access should be maintained as a grassy area through regular mowing. While it is often necessary to site basins within the buffer zone, the edge of the basin should be set back from the wetland edge to allow permanent protection of some portion of the naturally vegetated buffer. Basin plans should include construction details showing how the basins will be built without having heavy equipment encroach on nearby wetlands during grading of basin berms.

2

Millbury - Pedestrian/Bicycle Access

3 The Millbury site access road is located off Route 20 and will be 3,000 feet long. This road will provide good access for vehicles, but will not be easily accessible by bicycles and will be virtually unusable for pedestrians. The station itself, however, is located very near residential neighborhoods, including the new subdivision adjacent to the station and neighborhoods in the vicinity of Grafton Road/Route 122. The plans for the station should incorporate provision for pedestrians to enter the station site directly from these neighborhoods. The only other option for these people is to travel in a circuitous route over a mile long, along roadways. Such trips can

be expected to be made by car, not on foot. Where the station directly abuts the subdivision, it should be a simple matter to provide a narrow access for pedestrians and bicycles, either from the end of the cul-de-sac or from the undeveloped lot that is being partially used to build the access road (if this lot will remain undeveloped). And since there will be a pedestrian crossover bridge over the tracks to allow access to both platforms, it may also be feasible to arrange a similar pedestrian access point connecting to Route 122. These pedestrian/bicycle access points should be studied further and implemented if possible. 4

Grafton - Wetland Impacts

The wetland impacts and mitigation for the Pine Street bridge crossing are not discussed in this FEIR for the commuter rail project because the primary purpose of that bridge replacement is as part of a larger bridge replacement and freight track clearance improvement project. Several bridge replacements and grade changes are proposed along this Conrail line as part of a separate project that has the goal of increasing clearance over the track to 21 feet to accommodate double-stacked freight trains. Some elements of that project will be accomplished by the Massachusetts Highway Department replacing roadway bridges. Some of these bridge replacement projects, including the one on Pine Street in Grafton, will require wetland alterations. The Pine Street bridge replacement will also improve access to the new rail station and to the Bio-Tech Park project area.

The wetland impacts associated with the replacement and realignment of this bridge might not be necessary if this was a simple deteriorating bridge replacement. Increasing the height of this and other bridges over the railroad tracks may require widening and lengthening the approaches and abutments. In the case of the Pine Street bridge, realignment of the angle at which the road crosses the railroad will contribute to wetland impacts. Transportation Bond bills have allowed Massachusetts Highway Department to replace bridges within essentially the same alignment and have exempted such projects from requirements of the Massachusetts Wetlands Protection Act. However, **this exemption should not apply to projects such as the Pine Street replacement where the bridge design is being altered from present heights and alignments in order to accommodate double-stacked freight. The Society requests that the wetland impacts of all of the improvements for the freight rail clearance improvement project be required to be reviewed in a single comprehensive document under the Massachusetts Environmental Policy Act (MEPA).** 5

Thank you for the opportunity to comment.

Sincerely,

E. Heidi Roddis

E. Heidi Roddis
Environmental Policy Specialist

cc: Andrew Brennan, MBTA
Grafton Conservation Commission
Millbury Conservation Commission

Comment Letter No. 10

JOHN F. MORAN, CHAIRMAN, (Natick Board of Selectmen)
SHAUN R. FINNEGAN, VICE CHAIRMAN, (Ashland Board of Selectmen)
MILTON E. GILBERT, CLERK (Natick Planning Board)
CHARLES E. GAFFNEY, (Southborough Planning Board)
MARYANN K. CLARK, MEMBER AT LARGE, (Sudbury Board of Selectmen)
KATHLEEN B. BARTOLINI, DIRECTOR

Growth Management Committee
13 East Central Street
Natick, MA 01760
508-651-7350

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JUN 12 1996
MEPA

Ms. Trudy Coxe, Secretary
Massachusetts Executive Office of Environmental Affairs
100 Cambridge Street, Floor 20
Boston, MA 02202

June 7, 1996

Attn: MEPA Unit Janet Hutchins

Re: EOEA #9154 FEIR MBTA Stations (Grafton, Millbury and Framingham) and Rail Operations

Dear Secretary Coxe:

The MetroWest Growth Management Committee is a voluntary alliance of nine municipalities including: Ashland; Framingham; Marlborough; Natick; Southborough, Sudbury; Wayland; Wellesley; and Weston interested in the intermunicipal impact of growth. Formed 11 years ago, the communities have unanimously endorsed a process for conducting Regional Impact Reviews triggered by pre-established criteria, e.g., traffic and parking generated, number of housing units, total square footage or location nearby regional resources.

The Commuter Rail Extension to Worcester from Framingham has been a project that has generated a lot of interest and involvement on the part of MetroWest Growth Management Committee:

1. convened intermunicipal information meetings while project was still in conceptual stages,
2. serves on the CAC for this "major and complicated" project, and Director also serves as Vice-Chair;
3. have filed review comments to MEPA on each MEPA document submitted relative to this project.

Therefore, on behalf of MetroWest Growth Management Committee I am submitting the following detailed comments on the FEIR for Rail Operations and 2 Interim Stations plus the Framingham station.

We wish to reiterate our support for the Commuter Rail Extension and its need in the MetroWest subregion. We need efficient, affordable alternative modes of travel, in order to reduce private automobile usage to help resolve air quality and traffic congestion problems. This project can be an enormous help if properly designed to be consumer/rider friendly. We also support the train alternative versus buses, because we agree that consumers more willingly switch to a train mode

than a bus. Just as cars get caught in traffic, so do buses while the train can continue to go by along the dedicated tracks. This perception is reinforced daily on the Massachusetts Turnpike Extension.

Costs

1 We also accept the cost figures provided in the FEIR by the MBTA relative to their financial capacity to undertake this project. However, they do repeatedly state there is a bond authorization of $78 million for the project and than quote an $80 million cost figure. This $2 million short fall should be addressed.

Second, we are concerned about the overall budget as depicted on p. 2-13. Our questions are:

2 1. If no major noise or vibration mitigation is being proposed, only $80-85,000 for a sound barrier in Grafton, then what is the $1.2 million for, which is identified as noise and vibration mitigation?

3 2. The layover facility is really much more expensive than indicated, because land acquisition is not included in the $5,050,000 subtotal. How much of the $7 million is for land acquisition from Conrail? Site work has begun there so you must own the land. Downtown Worcester property is valuable. How much remains for the four remaining stations, assuming a $1.00 land transfer from DCPO to MBTA for Grafton station?

4 3. How much will the Grafton and Millbury stations costs? Why is there is no detail budget for them in this FEIR?

5 4. What is the projected land costs for the Millbury station given its commercial zoning on a highly developed area of Route 20 and the need for a 3,000 ft. ± access driveway? Will this be cost effective given the $3.3 million for station development and only 149 riders projected for 1997?

6 5. Please note Table 2.1-9 vs. Table 2.1-8. The first says there is $7 million for land acquisition and the second says only $6 million. Which is accurate? We are concerned that there is sufficient funds remaining to acquire land in Westborough, Southborough and Ashland where land values are higher.

Cost Recovery Ratio

7 The MBTA cites a 42% cost recovery for this line which is great. However, many want to control the amount of money the Legislature needs to appropriate to subsidize the T 's budget. Thus they want not only operating costs, but capital costs as well, to be calculated in the 35% guideline. This project will meet 33% with capital costs included, which is another strong point in its favors?

Millbury Station

As alluded to approve under budget concerns, the Millbury Station is quite expensive relative to the amount of projected ridership. Millbury is anticipated to have 149 riders in 1997 with all stations in

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place and only grow to 195 riders over the next 15 years, a gain of 46 riders or an average of three per year.

Millbury has never argued strenuously for a station and only wants it, if the access is in Worcester. There is a nearby residential subdivision in Worcester and both those residents and many city leaders have opposed this "Millbury" station. 8

Most importantly no ridership is lost from the line if the station is not built. It is re-allotted to Worcester and Grafton. Grafton is agreeing to the Worcester Business Development Corporation proposal for a major bio-tech office park near their station. They are already preparing for major influxes of traffic and could handle the 70 or more riders who would shift to the Grafton station. 9

Framingham Terminal

1. MetroWest Growth Management Committee, while being supportive of downtown businesses, must support Alternative Design #1 despite the loss of 10 on-street parking spaces. The chaotic situation which exists now, results in many more than 10 spaces being lost to illegal parking by MBTA users. To expend money to reduce a 300 + second delay down to over a 200 second delay does not make sense, when the delay can drop all the way to 30 seconds under Alternative #1. 10

2. The MBTA simply addresses the Bishop Street grade crossing by saying the town is handling it. The Town has a PWED grant for feasibility and design. However much of the delay at this crossing is directly attributable to the grade closings for trains which will now be more frequent with Basic Service in later 1996. The Town has officially asked the T to defray the cost of rubberizing this grade crossing since they are negatively impacting it. This must be addressed. 11

3. We do not support the ridership projections offered for Framingham in 2001 after five stations open west of the town. The T's contention that Framingham will have less riders in 2001 then it did in 1994 prior to Interim Service fails to acknowledge local and subregional growth and TDM efforts by our TMA, the Town and MetroWest Growth Management Committee to get people out of their cars. Interim Service saw a 40% increase in ridership with no T marketing program. All marketing efforts were focused on the new Worcester stop. Admittedly the MBTA did not expect ridership changes in Framingham and did not advertise the new express services. A 40% increase occurred anyway. 12

Basic Service this year will not see similar ridership increases, because parking is "maxed out." However, if new parking were provided additional ridership can be obtained by marketing the Computer Check program and educational programs about money saved in: tolls; Boston parking fees; lost drive time opportunities; and stress avoidance, especially during Central Artery construction. The MBTA should be funding these marketing and public education programs, as well as, expanded LIFT services to the station via direct grants to Framingham and / or the MetroWest Transportation Management Association. 13

Why is the MBTA using computer models regarding current town distribution of riders? They have pre-existing license plate surveys. They could do an update of this survey and one would know 14

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14 where riders used to come from versus where the Interim Service is drawing. This would help to verify projections regarding diversion of 50% of the riders to the west with BASIC Service or help to show this won't happen.

15 4. We strongly recommend a ticket kiosk at the Framingham station. Presently riders must go to a store along south side of Waverly Street to purchase ticket. There is a surcharge on tickets bought on the train. This results in hundreds of people parking either at town garage or T parking lot, both on North side of tracks, then crossing tracks and then crossing Waverly Street, purchasing ticket and re-crossing Waverly to get back to train station. An ATM type of kiosk dispensing tickets would help resolve this design flaw.

BASIC Service

16 It should be noted that this FEIR makes a major change from the DEIR. The DEIR proposed and analyzed BASIC service and an Expanded Service. Buried in the Appendix, it states that this FEIR no longer addresses or proposes expanded services. There is no discussion of why this change of decision was made.

Vibration Impacts

This FEIR says 15 homes will experience vibration impacts but no Best Available Control Technology is cost feasible to resolve the impacts, therefore, no mitigation is being offered.

17 First, there is no discussion in lay terms of what this vibration is and or how disruptive it will be to people's lives. We are simply told it is low frequency and ground-born but it will not cause a structural impact. What impact will it carry? One needs to know before one decides it is not worth spending money to remedy it.

18 Second, the CAC requested that the CAC be provided a map of the rail ROW with structures (residential commercial depicted within 50 feet of the track. This map could be used for both vibration and noise impact to see where these structure are located relative to the rail. None of the towns can understand how so few units can be impacted when they are built in a straight line with similar setbacks from the tracks. To state that the Rail ROW is 66 feet wide and no homes are in the right of way is misleading. Structures are close than 60 feet from the tracks in the MetroWest Towns of Ashland and Southborough. Why are so few impacted?

19 You also provide a table 5.2-5 that says four homes in Southborough will experience an impact and none in Ashland. Then the text says Ashland is heavily impacted but is silent on impacts for Southborough. Is this a typo or error? See page 5-28 versus Table 5.2-5.

20 On page 3-26 the last sentence still offers the potential of ballast mats for mitigation, yet the section on vibration says they are not feasible. This inconsistency needs to be addressed, just as a better explanation is needed on why the inconsistencies regarding similar proximity to track are not resulting in similar impacts. At CAC we were told map could be done to clarify. Why was it not

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done? [There is a note in Appendix M regarding in this map but it was not forwarded to us for review] 20

The reviewer is referred to Appendix F for more vibration details. This reviewer never received any lettered appendices. I received two volumes and assumed as Vice Chair of the CAC I received every document referenced. It was not until late in the review period after reading every page in the two volumes I learned that the MBTA failed to provide the required MEPA documentation. I checked with officials in Ashland, Southborough and Framingham and learned that none of them had the needed materials either. 21

Please do not approve this FEIR until the cited appendices are forwarded to the towns and MetroWest Growth Management Committee for at least a 30 day review.

Why does this FEIR dismiss out of hand reducing train speed as a way to mitigate for noise and vibration impacts. It certainly is a low cost solution. Freight trains have not been going through at these high speeds previously and Interim Service has been slower due to train traffic and the lack of two tracks for an 11 mile distance. Track improvements will enable higher speeds but cause other problems. This should be analyzed in an FEIR. 22

Also, page 5-31 seems to say in the Receiver Vibration Control Section that purchasing the isolated properties or an easement is a viable form of mitigation. You said when "mitigation costs more than the property, acquisition is most cost-effective." Then why isn't this mitigation offered regarding scattered sites? It is justified in the FEIR and then just dropped without explanation. 23

The only mitigation offered is track maintenance. The reader is not told, however, how much of a decrease in noise and vibration will be achieved for the nearby property owners. It appears maintenance will only ensure it doesn't get worse versus helping it to get better. This is not mitigation. 24

<u>Noise</u>

The same problem exists regarding noise impacts. The data must be in the missing appendix because the two volume FEIR does not contain information necessary to assess the adequacy of analysis and the lack of mitigation, other than a sound barrier in Grafton. 25

Much more attention to **horn blowing** is needed for all grade crossings, especially in Ashland. The T is causing more gate closings during early morning and late nights. They have an obligation to resolve this problem. Stationary horns are not the untested technology they would have you believe. We request stationary and "self-adjusting" horns as Best Available Technology which is cost feasible. 26

It states on page 5-14 that "A standard <u>theoretical</u> model was used to predict existing and future noise levels." This is unacceptable. Actual noise levels should be monitored at sites all along the proposed extension to determine current ambient and then determine impacts based on train impacts in increased decibels. Taking average day and night computer models also averages in the quiet 27 28

28 times when trains are not passing. The impact should be based on the ambient for time of day additional trains from Interim and BASIC service will be going through. For example, if there was no noise prior to Interim service at 7:00 a.m. or 8:00 a.m. in Ashland and now there is train noise, then there is an impact. If the impact is greater then five decibels, then it has to be mitigated. You don't need to use theoreticals for existing noise, you can and should meter it. Models are for future projections. Please note that noise and vibration issues were not resolved in FEIR for Interim Service, but were to be analyzed better in this FEIR, so impacts need to be calculated prior to Interim Service being instituted.

29

Commercial Noise

30 The appendix, which was provided, addresses commercial data for the Ipanema Restaurant and Fitzgerald General Store. It appears that there will be internal vibration and noise problems for at least the Ipanema. Certainly a business where people go to dine and relax with friends has to be classified "an institutional use" under noise / vibration regulations.

31 This same depth of analysis is needed for John Stone's Inn and Burnham's Restaurant in Ashland.

Noise Impacts

32 What is the perceived difference between severe noise impacts as opposed to noise impacts? How are people going to be bothered? What is the MEPA position on "impacts" versus "severe impacts"? Who says only severe impacts need to be mitigated? The FEIR fails to tell us what level of impact will be experienced by the houses along the track.

33 **We request that the DEP review the sound appendix omitted from the filing to determine how the data relates to Massachusetts Noise Regulations under their jurisdictions.** The precedent for this was just established under a similar situation in the MetroWest area with M.W.R.A. Water Supply Tunnel. M.W.R.A. provided Technical Assistance funds to the potentially impacted communities through the MetroWest Growth Management Committee to purchase consulting services to review M.W.R.A.'s MEPA submissions on complicated and technical topics such as noise. No similar funding arrangement was offered by the T, so, we need DEP to help determine what decibel levels (day vs. night) need mitigating and what is the appropriate Best Available Control Technology.

Mitigation Policy

The MBTA is writing their own policies and substituting them for existing MEPA mitigation policy. Example:

1. No more than 2% of total project cost shall be expended on noise and vibration impact.
2. Placing a $2,400 / structure cap on cost feasibility for mitigation.
3. Stating they will only mitigate something if they alone break it.

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It is our understanding that MEPA mitigation policy is "if you contribute a 10% or greater impact, you will contribute proportionately to its mitigation." If you want the public to pay for mitigating the pre-existing problem, then you can wait, until the public can afford to incur these costs for design and implementation before commencing your project. There are no limits to mitigation costs. If the needed mitigation causes the project to be financially infeasible, then you do not build the project as opposed to building it without mitigation. We certainly do not allow private developers to impose such caps and other limitations. We cannot hold the public sector to a different but lower standard. It should also be noted that financial infeasibility is one of the criterion by which DEP says this project can be waived or altered. Thus quality mitigation should be costed out now to ensure well designed stations, off-site improvements and fewer long term impacts. Only by doing this now can we be sure the project is in fact "cost feasible." 34

At-grade Crossings

It seems odd that an entire chapter is offered on solving traffic problems generated at the Framingham Station, and then the T states there is no alternative but to establish similar problems for Ashland grade crossings. More discussion with the Town of Ashland is needed. If you can't find roadway solutions, what MBTA sponsored TDM alternatives would prove beneficial? It is ironic that TDM, is not discussed anywhere in the FEIR, although we require private developers to make TDM commitments and pay for MetroWest TMA to undertake mitigation projects. 35

Archaeology and Historical

This is a totally inadequate discussion. If the work is not done, but needed, then don't file the FEIR until the work is finished. The public is not being given a chance to comment on the findings. This is a closed inter-agency MOA, again not included in the two volume submission, but alluded to as if we had it. 36

This FEIR should not be granted a certificate until this data is available and out for public review.

Route 85 Bridge

To quote the FEIR (page 5-36), "The Route 85 Bridge in Southborough warrants discussions." That discussion should be more than seven lines. 37

We learned this week the bridge is at 100% design and will be bid later this month.

This was the first time the town officials saw the bridge design since the 30% stage, so much for community / public participation. This information also contradicts status provided on page 5-36. 38

The bridge is an historic gateway. The granite facade should be maintained. There should be more discussion of the "facsimile granite" they are contemplating. 39

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40 The Town and MetroWest has repeatedly opposed a pedestrian overpass at this station given the elevation of the tracks and a pre-existing underpass. We are please that the T plans to drop the overpass, but to channel all riders under the 85 bridge is too long a walk to parking and / or trains to encourage ridership, especially handicapped riders. The handicapped parking is no where near handicapped ramps planned to go under bridge.

41 We repeat that an underpass is the only viable option for this station. What are the costs for an underpass versus these other alternatives, e.g., overpass and that shown in the 100% plan?

42 The issue of how high the bridge should be fails to mention the bridge is in a flood plain and already experiences flooding. Since it isn't feasible to raise the tracks, they want to lower the road. However, the road would be flooded even more often. It is not merely an issue of avoiding or enabling truck traffic as FEIR infers.

43 The FEIR appendix, responding to DEIR comments, says there will be no detour while the Route 85 bridge work is done. This week they told us sometimes the road under bridge will be shut down. Traffic will be diverted from Southborough to Ashland's Howe Street Bridge to get to Hopkinton. This FEIR does not analyze this, but it should.

44 We were told in DEIR no pile driving would be needed, thus no undue construction noise. They now know they need piles. Why isn't a Notification of Project Change being filed versus going out to bid in June? What will be the noise impacts of construction on homes and businesses?

45 The Route 85 Bridge if kept on proposed schedule won't be done until sometime in 1997. We are told Conrail won't let BASIC Service commence until bridge is completed. Therefore, time frames offered in this FEIR are wrong for Grafton and Millbury service.

Thank you for the opportunity to comment on this FEIR, EOEA #9154. We look forward to your response to our comments. Please keep MetroWest Growth Management Committe on mailing list for all future communications relative to this project. If you have any questions and / or concerns regarding this submission please call me at (508) 651-7350 or 7351.

Respectively submitted,

Kathleen B. Bartolini

Kathleen B. Bartolini
Executive Director

cc: John Moran, MetroWest Growth Management Committee Chair
Transportation Taskforce
John Stasik, Chair
Ashland Board of Selectmen
Southborough Board of Selectmen
Ashland Planning Board

Comment Letter No. 10

Southborough Planning Board
Shaun Finnegan, Board of Selectmen, Chair, Ashland
Bill Christensen, Board of Selectmen, Southborough
Charles Gaffney, Planning Board, Southborough
Ed Bates, Deputy Director, MAPC
Dexter Blois, Town Manager, Ashland
Janice Conlin, Town Manger, Southborough
Steve Kerlin, Town Planner, Ashland
Wayne Thies, Town Planner, Southborough
Representative John Stefanini
Representative Barbara Gray
Senator David Magnani
Senator Robert Durand
Representative Barbara Gardner
David Kutner, Planning Director, Town of Framingham
Cindy Frene, Director of MetroWest Transportation Management Association
DPW Directors, Towns of Framingham, Ashland, and Southborough
David Robbins, Chair of Citizens Advisory Committee
Mark Davis, Chair of Local Study Committee, Southborough
Dexter Malone, Study Committee, Ashland

Comment Letter No. 11

THOMAS R. HOOVER
CITY MANAGER

CITY OF WORCESTER

RECEIVED
1996
MEPA

June 6, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
20th Floor
100 Cambridge Street
Boston, Massachusetts 02202

RE: EOEA #9154 - Worcester Commuter Rail Extension Project

Dear Secretary Coxe:

The City Manager's Office of Planning and Community Development (OPCD) has reviewed the Final Environmental Impact Report (FEIR) for the Worcester Commuter Rail Extension Project (EOEA #9154) pertaining to the proposed Millbury Station, Grafton Station and railroad operations. The City's review of the FEIR document has focused primarily on impact issues resulting from the siting of the Millbury station and location of the station's access road proposed to be located off of Route 20.

The City of Worcester wishes to notify you of City government's grave concern regarding the poor quality of the FEIR in its lack of information and failure to adequately address in the project design both traffic impacts to the Route 20 area and residential abuttor siting impacts from the Millbury station access road location proposal. Deficiencies of the FEIR in these impact analyses categories are detailed as follows: (1)

I. Traffic Impact/Analysis Deficiencies: The City Department of Public Works Traffic Engineering Division details the following items of FEIR deficiency:

1. Site Selection - The document states in Sec. 3.1, Pgs. 3-11 that "the MBTA has selected the Route 20 site as the preferred location "...(to) reduce the potential impact to local traffic...". This statement is too vague and the lack of detail causes concern in light of the information supplied for accidents on Route 20. (2)

2. Accident Data/Route 20 - The FEIR does not supply accident information which is important to determine the effect of a new signalized intersection in the area. The FEIR also does not include any accident information for the Route 20/Route122 interchange. The majority of additional traffic volume generated by the new station will be using the ramps of this interchange. (3)

OFFICE OF THE CITY MANAGER, CITY HALL, WORCESTER, MASSACHUSETTS 01608
TELEPHONE (508) 799-1175 FAX (508) 799-1208

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3. New Signalized Intersection - Signalized control of the new access road will be required. The proximity of the new access road to the intersection of Route 20 and Sunderland Road, the mall traffic at the proposed access road site and the volume of traffic entering and exiting the access road within a short period of time will contribute to the demands for the signalization. The FEIR does not note any discussion or agreement with the Mass. Highway Department which maintains authority over this roadway. Their agreement and approval will be required.

4

4. Route 20 - The FEIR states that contributing factors for the accidents reported on the section of Route 20 between Sunderland Road and the Route 122 interchange may be poor channelization and high speed and also uncontrolled access and turns against moving traffic. However, the document does not at all address these problems. The MBTA should coordinate with the Mass. Highway Department to propose within the FEIR document mitigation which might include centerline divisions, sidewalk and curb cut revision and merge lanes for the Route 122 interchange ramps. The City of Worcester believes it to be critical that the FEIR accident data be broadened to include the lengths of Route 20 and Route 122 along the entire area and for the past five (5) years.

5

6

5. Route 122 (Grafton Street)/Route 20 Interchange - In Sec. 6.2, Pgs. 6-28 it is stated that "Currently, the turning movements at the ramp from westbound Route 20 to Grafton Street in Worcester operate at unacceptable levels. This situation is due to the substandard design of the interchange and will continue with or without construction of a rail station." It further states "In summary, while general improvements to increase capacity are warranted on both Route 122 and Route 20, traffic generated by the proposed commuter rail station will not adversely impact the operating characteristics of the roadway." While the additional volume at the peak hours may not be great enough to lower the LOS, it will significantly change the data for that intersection. Secondly, while the new station has not caused the current conditions, it also does not improve the situation. The MBTA should coordinate with the Mass. Highway Department to propose mitigation within the FEIR document which would include general improvements to the interchange.

7

6. "Build" Scenarios - The data supplied for the various "build" scenarios shows acceptable levels of service at the signalized and unsignalized locations, the exception being the access

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road to the new rail site. An LOS of D for this driveway is acceptable but an agreement would be required with the Mass.Highway Department to insure that the signal timing was not altered in the future to reduce the queues on the driveway in the PM peak. The LOS for the "Build Millbury Only" scenario should be reviewed. Our experience with the interim service area on Shrewsbury Street in Worcester tells us that 347 commuters exiting one driveway during the PM peak may be more problematic than the data suggests. 8 9

7. Big Y MEPA Report/Certificate - The City of Worcester has been unsuccessful in obtaining from MEPA a copy of the MEPA recommendations from the Stop & Shop (Big Y) Environmental Impact Report for the current Big Y property on Route 20. The City hereby requests receipt of a copy of this previous MEPA determination and requests that MEPA determine whether or not the proposed commuter rail station proposal necessitates amendments to the Big Y MEPA certificate conditions. 10

8. Dalton Street/Blithewood Avenue - The FEIR fails to address the proposed project's affect on the scheduled signalization on Grafton Street at Dalton Street and Blithewood Avenue. 11

II. Residential Abuttor Impact/Analysis Deficiencies: OPCD provides the following items of additional FEIR information/ analysis deficiency:

1. Definitive Subdivision Plan Review - The FEIR does not acknowledge that the applicant will be required under MGL Chapter 41 to submit a definitive subdivision plan application to the Worcester Planning Board for review and approval of the new 3,000 foot long station access roadway off of Route 20. 12

2. Neighborhood Residential Impacts - On Page 6-1 the FEIR states regarding the project that there does not appear to be any substantial negative effect on this neighborhood. Section 6.8 (Pages 6-36 & 6-37) of the document also states that combined landscaping and lighting design mitigation should limit project effects on site neighbors. Both statements are extremely vague and lack any substantiated design information or detailed mitigation proposal to address the project's obvious negative visual, lighting and noise impacts upon abutting residences. MEPA should require further information and analysis of these issues as part of a revised FEIR and require mitigation proposals on these items to be included in the FEIR. Futhermore, the FEIR does not acknowledge the number of children living with the residential neighborhood and the attendant safety concerns associated with them. The 13 14

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14 City of Worcester requests that MEPA require the FEIR to provide a comparative analysis of lots being impacted by thisproposed Worcester accessed station as opposed to the facts shown for the abandoned Millbury accessed site.

3. Conservation Commission Review - The document states on Page 6-41 that project elements will be reviewed by the Worcester Conservation Commission. To date, the project has not been submitted for Commission review. The FEIR should reserve the right of City government to raise any additional project design issues not raised or addressed at this time via the local Conservation Commission review process and within other local project permit review processes as mandated by state and local ordinance. 15

4. Access Road Maintenance/Ownership Issues - The FEIR does not address ownership or maintenance issues and responsibilities for the new 3,000 foot long station access roadway off of Route 20. The City does not have the capacity to handle maintenance and security of this access road. 16

5. Deficient CAC Process - The City of Worcester notes as part of this FEIR comment that the City considers the Commuter Rail Project CAC to be conducting a review process that is unfair to Worcester residents and officials and requests that MEPA mandate the CAC to involve a more comprehensive and participatory review from area residents proposed to be impacted. 17

City department review of the above FEIR concerns support the conclusion that the FEIR for this project is seriously and critically flawed, both in the lack of critical safety information and the failure to either acknowledge or analyze the critical project impacts as detailed above. Of even more serious deficiency is the FEIR's failure to propose within the document any improvement project to the Route 20 and Route 20/122A interchange issues to assure the safety of the proposed station site as well as correcting the impact deficiencies from the project.

In conclusion, the FEIR, in its present form, is grossly deficient in its failure to offer basic project information and design mitigation strategies as detailed above. Acceptance of the FEIR by EOEA in its current format would result in serious negative health, safety and welfare impacts to the abutting residential neighborhood population, to commuter rail station users and to the general area population utilizing the Route 20/Route 122A traffic corridors. I urge you to dissapprove the project FEIR in its current format and direct the project proponent to revise the proposed FEIR to include

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both further project impact analysis and project design strategies as recommended above.

Sincerely,

Thomas R. Hoover

THOMAS R. HOOVER
City Manager

/jis
cc: Stephen F. O'Neil, Director, OPCD
Robert L. Moylan, Commissioner, DPW

Comment Letter No. 12

CITY OF Worcester MASSACHUSETTS

RECEIVED

MEPA

PAUL P. CLANCY, JR.
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May 31, 1996

Ms. Trudy Coxe
Secretary
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, Massachusetts 02202

Attention: Janet Hutchins
MEPA Unit

Dear Secretary Coxe:

I write in reference to the Final Environmental Impact Report for the Worcester Commuter Rail Extension (EOEA #9154). In particular, my concern rests with the proposed siting of the Millbury station (section 6.0 in the F.E.I.R.). I have received scores of protests regarding this proposed siting during the last four months and I strongly oppose this plan for the following reasons:

1. The intersections in the immediate area of the proposed signalized intersection of the Millbury station's access road and Route 20 were not included as studied intersections (figures 6.2-1 and 6.2-2). These are serious omissions to any thorough study of local traffic impacts. Those intersections that should have been included are: (1)

   a. Route 20, Sunderland Road and Westborough Street (Worcester)
   b. Lake Avenue and Sunderland Road (Worcester)
   c. Grafton Street and Sunderland Road (Worcester)
   d. Route 20 and Massasoit Road (Worcester)
   e. Route 20 and Edgemere Boulevard (Shrewsbury)

   (2)

   These abutting, signalized intersections were probably not reviewed because the bulk of those studies for the originally planned access road at the Massachusetts Turnpike Interchange were simply recycled. It is inexcusable that any traffic study for the impacts of the proposed access road would not include those signalized intersections that are in the immediate vicinity of the proposed intersection. (3)

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4 2. The report does not address any improvements to the Route 20 and Route 122 interchange which is 1,750 feet from the proposed access road intersection. The Routes 20 and 122 interchange was engineered decades ago and is obsolete. To add a commuter rail station in the immediate vicinity without any proposed upgrades to said interchange is unacceptable. Certainly a more detailed proposal outlining the necessary upgrades at this interchange are needed. Further, I would hope that any upgrades would consider signalization of the interchange on Route 122 (Grafton Street) for all Route 20 exits/entrances and the addition of a climbing lane on Route 20 for all traffic accessing Route 20 westbound.

5

6 3. On page 6-10 and 6-11 of the report, reference is made to concerns about Route 20 safety in the vicinity of the Route 20 proposed station access driveway. Further, the most recent accident data was from the year 1993. Further explanation and research is necessary. Every effort should be made to collect current accident data regarding this stretch of Route 20.

7 4. Given what accident data is available, appropriate mitigations need to be stated to minimize the "uncontrolled access and turns against moving traffic," the "poor channelization," and the "high speed" which are all listed as contributing factors to the dangers of said stretch of Route 20. The addition of asphalt or granite curbing would give definition to the roadway and further limit access. Also, the addition of jersey barriers along this stretch of roadway would further limit the uncontrolled access and turns. Considerations on limiting speed need attention in this report.

8 5. I can find no references to the Stop & Shop (now Big Y) Final E.I.R. from the late '80's and subsequent conditions which restricted turns onto Route 20 at this same site where a fully signalized intersection is now proposed. This had been a recommendation by the City of Worcester in the Stop & Shop Final E.I.R., but was denied. Now, a new Final E.I.R. reports on the same site without reference to the Stop & Shop E.I.R. comments and conditions. I don't know why these previous conditions are not addressed in this report.

9 6. The presumptions of the traffic patterns on distribution map 6.2-4 "Build All Stations" scenario are most curious. It presumes that commuters traveling from Auburn, Charlton and Oxford would use Route 20. Yet, certainly, with easy access to both I-290 and I-90 in Auburn, Charlton and Oxford, it may

Comment Letter No. 12

be more convenient to travel I-90 to the Millbury exit or I-290 to Worcester (Grafton St. exit) to access the Worcester commuter train station. The presumptions in the report may be flawed. Further presumptions are that Boylston commuters would use the Millbury Station and that no Shrewsbury commuters would use the Route 20 Millbury Station. Clearly, an explanation of why Boylston commuters would use this station and why no Shrewsbury commuters would use it (when the Shrewsbury town line is only about one-tenth of a mile from the proposed train station intersection) are in order. 9 10

7. There are no references to municipal jurisdiction for said station, parking lot and roadway. The station and parking lot are located in a remote section of Millbury while the proposed roadway from Route 20 rests in Worcester. Given the shared jurisdictions of said proposal, there needs to be clear cooperation agreements between the two municipalities. Further, emergency response access and jurisdiction needs review as well as appropriate emergency access to site. Also, police response to site needs clarification. Given the remote location and the very close proximity to area homes (approx. 150 feet), formal policing procedures and restricted non commuter access to the site need to be developed. 11 12

8. The Hazardous Materials section of said report (pages 6-37 and 6-38) discussed "limited" environmental site evaluation. However, given the serious problems of the recent past with groundwater and well water contamination in the area associated with the Wyman-Gordon facility and given the site's sensitive location to both the Flint Pond and Lake Quinsigamond, both recently designated "Great Pond" sites, a more thorough and comprehensive study <u>should have been completed</u> for this report. The Final E.I.R. should not have been submitted without this vital environmental information. Our water resources are much too precious to be subjected to rushed and incomplete reports. 13

9. Finally, the second paragraph on page 6-1 of the report states: "With input from the Citizens Advisory Committee (C.A.C.), the Millbury Commuter Rail Advisory Committee (M.C.R.A.C.), and consideration of comments received on the Draft E.I.R., the MBTA has designated the Route 20 access alternative as the proposed Millbury Station site."

As an elected local public official, I have found this public process to be seriously flawed and compromised. The C.A.C. referenced above has three members from Worcester whose focus was the development of the Worcester commuter rail site at Washington Square in Worcester. The 14

Comment Letter No. 12

"Millbury" Station site impacts the traffic patterns, traffic study, wetlands, drainage, visual impacts, and potential hazardous waste migration directly on Worcester. To call it the Millbury Station is a misnomer because the bulk of all impacts rest with and in Worcester. As a member of the Route 146 C.A.C., I have found the Massachusetts Highway Department and the Massachusetts Turnpike Authority to be most informative about the proposed Route 146 roadway expansion plan. This is not true of the MBTA. At no time was I ever contacted by them regarding a significant impact to traffic, environment and transportation in my district. The Route 146 C.A.C. posts its meeting with the Worcester City Clerk's office. This is not true of the MBTA C.A.C. meetings. None were posted with the City Clerk's office, and as a result were not published in the local paper under agency meetings. To compound this lack of public notification was the practice of the Worcester Telegram & Gazette to publish news in various editions. Hence, the news stories about the location of the Millbury Station appeared only in the "Blackstone Valley" edition of the newspaper and not the City of Worcester edition. Therefore, any flow of information was seriously hampered. It was therefore paramount for MBTA officials to contact local elected officials. The results of this process have been skewed to Millbury's concerns. The MBTA gave cursory treatment to the requirements of the C.A.C., but should have and could have done much more to open the process to all parties and individuals impacted by this project. In my nine years of public service, I have never experienced such a blatantly passive bureaucracy as the MBTA. Further, I better understand the public's contempt for governmental agencies that give priorities to their own agendas rather than working to achieve a fair, objective process that considers all the public good. For a public agency such as the MBTA to give special consideration to the parochial interests of the M.C.R.A.C. and further, to make recommendations that blindly ignore the existence of an abutting interest (residents of Flint Pond Village) is wrong. This process as conducted by the MBTA has been flawed; and, rather than move to correct inequities, MBTA officials have used bureaucratic stonewalling to perpetuate them.

14

15

MBTA officials could take a lesson from their counterparts in the Massachusetts Highway Department and in the Turnpike Authority. They could learn how a fair, open process is supposed to work.

Thank you for your consideration of my comments.

Sincerely,

Paul P. Clancy, Jr.

Paul P. Clancy, Jr.
Councillor - District 3

PPC/amh

Comment Letter No. 13

CITY OF Worcester MASSACHUSETTS

STEPHEN T. PATTON
COUNCILLOR - DISTRICT 1

16 Hapgood Road
Worcester, Mass. 01605
Telephone:
Home: (508) 852-3475
Office: (508) 799-1049

RECEIVED
JUN 3 1996
MEPA

May 31, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, Massachusetts 02202

Attention: Janet Hutchins
MEPA Unit

Proposed "Millbury" MBTA Rail Station
EOEA #9154

I would like to provide my comments on the proposed MBTA station in Millbury. As a Worcester City Councillor and a member of the Commerce & Development Committee, I participated in several Council discussions in a Commerce & Development Committee meeting with residents and have revieved the Final E.I.R. Section 6.0 Worcester Commuter Rail Extension #9154.

Based on my evaluation, I am opposed to the proposed site and share my concerns as well as those of the residents with regard to safety and of participation in the process. (1)

The Worcester Commuter Rail is a vital link for access to and from Worcester and I am a strong advocate of expanded schedules

The revised location from the Draft E.I.R. came as a surprise to me. The original site met all of the use requirements and seems to have been moved based solely on the rejection of the site by the Millbury Citizen Advisory Group. There is no scientific rationale for the change and I recommend that the site proposed in the Draft E.I.R. be reconsidered. (2)

The current location was selected without the inclusion of any local residents. This is clearly a violation of the intention of the E.I.R. process and any decision made without local citizen input should be rejected. (3)

Comment Letter No. 13

4 The neighborhood that the new site abuts is dominated by young families and the potential danger to children cannot be ignored without serious hazard.

5 I implore you to reconsider your siting decision and to take the time to carefully review either moving this site or eliminating it entirely. The distance from this location to either Union Station or the proposed Grafton Station would not be a hardship to many users and would greatly benefit the residents of this neighborhood.

Thank you, in advance, for your consideration.

Sincerely,

Stephen T. Patton
amh

Stephen T. Patton
Councillor
District 1

STP/amh

Comment Letter No. 14

MBTA
ADVISORY COMMITTEE
MILLBURY, MA 01527

Jeffrey Dore-Chairman
Warren Senecal -Vice Chairman
Margaret Lavallee-Clerk
Joseph Bianculli
Stephen Bishop
William Breault
Mary MacAdam
Howard Murphy
Brennon Wall

June 3, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

RECEIVED
JUN 5 1996
MEPA

RE: EOEA #9154
Worcester Commuter Rail Extension Project FEIR

Dear Secretary Coxe:

The Millbury MBTA Advisory Committee would like to comment on the Millbury Station chapter of this FEIR:

1. Archeological resources
This committee would like to see the report on the final study in Millbury. (1)

2. Route 20 access road and Economic enhancement
Provisions for water and sewer access would be economically benificial to the city of Worcester and Millbury. The MBTA should work with Worcester and Millbury in arranging this prospect for economic development. (2)

3. Safety
This committee does not believe the MBTA has adequately addressed the safety of people using the access road and train station in Millbury. It needs to be decided who will be responsible for patroling the area - Worcester or Millbury Police? Due to the controversy over the Route 20 access road and the Millbury station location by Worcester residents, the MBTA needs to reaffirm who is responsible for the safety of the MBTA commuters at the access road and at the station. (3)

4. Compensation for Town Services
Will the towns who provide services to the access road and the station site receive compensation from the MBTA for these services? Futher clarification is needed by the MBTA on this matter. (4)

Comment Letter No. 14

5 5. Fire Hydrant
The Millbury Fire Chief has requested that there be a fire hydrant located in the parking area of the Millbury station. This committee advises the MBTA to address this issue.

6 6. This committee reserves the right to comment on any future issues should the station be built in Millbury.

This committee is in agreement with the MBTA 's station site location off of Route 20 in Worcester. We would anticipate that the visual screening with vegetation and the careful control of lighting would limit impacts to those residents of the Flint Pond development.

Respectfully submitted on behalf of the members of the Millbury MBTA Advisory Committee:

Margaret A. Lavallee

Margaret A. Lavallee
Clerk

cc: Millbury Board of Selectmen

Comment Letter No. 15

TOWN OF GRAFTON

TOWN ADMINISTRATOR

30 PROVIDENCE ROAD
GRAFTON, MASSACHUSETTS 01519

Telephone: 839-5335
Fax: 839-4602

RECEIVED
JUN
OFFICE OF ENVIRONMENTAL AFFAIRS

June 4, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, Ma 02202

RECEIVED
JUN 5 1996
MEPA

Attention: Janet Hutchins
MEPA Unit

Dear Secretary Coxe:

The Board of Selectmen has directed me to communicate to you their position relative to the MBTA Commuter Rail Station being proposed for Pine Street in Grafton, Massachusetts.

The Board of Selectmen fully supports this proposal regardless of any action taken relative to the siting of a rail station in the Town of Millbury. The Board of Selectmen does not wish for the Grafton project to be delayed while siting options are further explored for a Millbury location.

1

This support is predicated on the understanding that the MBTA will take action to mitigate adverse traffic impacts upon the Rte 140/Rte122 /Bridge Street intersections known locally as "Quinsigamond Corner". It is the Board's expressed understanding that this mitigation will take the form of the MBTA and/or other State or Federal Agency or Program assuming the full cost of engineering, right of way acquisition and construction of the required signalization.

The Board of Selectmen wishes to thank you for your assistance in this matter and if you require any additional information, please advise.

Truly yours,

Daniel J. Morgado
Town Administrator

cc Senator Matthew Amorello
Representative George Peterson
Planning Board
Grafton CAC c/o David Robbins

Comment Letter No. 16

FRAMINGHAM PLANNING DEPARTMENT
150 CONCORD STREET • MEMORIAL BUILDING • ROOM B-2 • FRAMINGHAM, MA 01701-8373
TELEPHONE: 508.620.4852
FAX: 508.620.4813

June 7, 1996

RECEIVED
JUN 1 1 1996
OFFICE OF THE SECRETARY
OF ENVIRONMENTAL AFFAIRS

Ms. Trudy Coxe, Secretary of Environmental Affairs
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Attn.: MEPA Unit

Re: Worcester Commuter Rail Extension
EOEA No. 9154

Dear Secretary Coxe:

The Planning Department has received and reviewed the *Final Environmental Impact Report for the Millbury Station, Grafton Station, Railroad Operations*. We appreciate the efforts that have been made on the part of MBTA's project staff to respond to the concerns raised by the Town regarding the proposed Framingham Station reconstruction and its associated impacts. A number of issues still await final resolution, however, and we offer the following comments:

Traffic Data and Analysis Methodology

The FEIR provides train, ridership and parking data. However, it would be helpful to the Town's present planning efforts, including the 126 Corridor Study presently underway, if additional specific information was supplied in a simple and readily accessible form. This information should include a delineation of rail traffic which identifies the total number and duration of each gate closure for current rail crossings, Interim Service, and Basic Service. Current and projected ridership data is supplied. However, parking demand projections are questionable at best. We suggest that license plate surveys of neighboring streets, interviews with adjacent merchants and with Framingham Police, and ridership surveys should be included. 1

Although traffic data was collected for 1994 prior to the onset of interim service, no data is supplied for current conditions. This data would help to provide some confidence that future estimates of traffic and parking demand are reasonably accurate. Furthermore, the report clearly indicates that the excess parking demand currently experienced is difficult to quantify. Yet all long term parking facilities within vicinity of the Framingham Station are oversubscribed with lengthy waiting lists. Furthermore, we are aware that significant parking spill-over continues to be experienced throughout the area ever since interim service became effective. A thorough study of this condition is likely to indicate that parking, in addition to what is planned for the south wye, may be needed in the future. 2

Comment Letter No. 16

3 The Introduction to Section 8.0, **Environmental Impacts - Framingham Station**, reveals that trains added with Interim Service "*...have proven to be extremely popular, with the Framingham boardings currently at 1,350 to 1,400 riders each weekday...*". Data provided by the Metropolitan Area Planning Council taken in July of 1995, (presumably during the lowest ridership periods), report ridership as high as 1,688, indicating that Framingham had the second highest ridership figures on the system during that period. The fact that MAPC's ridership figures are significantly higher than boardings reported in the FEIR offers a reasoned argument that ridership projections, and the related traffic and parking demand figures, be revised upward.

Proposed Mitigation

4 The short-term mitigation measures proposed in Section 8.0 are in direct response to the concerns raised by the Town in earlier correspondence and are appreciated. The Town's Safety Committee, comprised of representatives from the Police, Engineering, Public Works and Planning Departments is presently reviewing the options presented and will provide its assessment and preference between Alternatives 1 and 2 in the immediate future. In view of the fact that these measures are intended to help offset the impacts of the Worcester Extension, we ask that they be considered for construction *simultaneously* with the re-construction of the Framingham Station. In addition, we ask that the construction of the additional proposed parking in the south wye be constructed prior to, or in conjunction with, the Station re-construction.

5 Section 8.0 of the FEIR confirms that the additional gate closings the Town will experience in conjunction with the Interim and Basic service will primarily affect the 126/135 intersection *and* the Howard/Bishop/Waverley (Rte. 135) intersection. The Town is presently preparing final design plans for reconstruction of the intersection of Bishop and Waverley Streets. The MBTA's assistance in defraying costs associated with "rubberizing" the rail crossing at this intersection upgrade would be helpful to mitigate the impacts of gate closings associated with the additional rail traffic. In addition a highway easement within MBTA's right-of-way to afford improved roadway alignment will be needed.

6 Town staff has been working the MBTA project team to integrate proposed improvements at the Framingham Station with a Streetscape improvement program presently under design within the downtown business district. We ask for continued cooperation in coordinating the design and schedule for improvements at the Station with this program. In particular, the Town seeks to develop clear pedestrian connections from the proposed new location of the station platforms to the downtown area. The existing platforms offer a visually clear and unimpeded path with immediate access to the public sidewalks which connect to the Downtown and various modes of transportation available there. The proposed station plans re-route passengers off this direct travel out onto Waverley Street. This creates a safety problem because Waverley Street is a busy arterial. In addition, the absence of a pedestrian connection will discourage activity in the commercial center of the Town. We ask that the station design provide continuous and direct pedestrian ways for west-bound and east-bound passengers to Concord Street which would measurably contribute to the vitality of the Downtown.

7 Tickets are currently sold only at a store on the south side of Waverley Street requiring riders seeking to purchase such tickets to cross this busy corridor. In an effort to off-set potential pedestrian/vehicular conflicts, the probability of which will increase as ridership climbs, we

Comment Letter No. 16

suggest that consideration be given to offering ticket sales at a convenient location on the proposed or existing passenger platforms. The historic baggage building located immediately east of the existing south side platform would also be an excellent location for ticket sales. Furthermore, reuse of this small structure would also reclaim this historic building and provide a better environment for the station. 7

The FEIR clearly states that parking demand presently exceeds supply. However the FEIR also assumes that by year 2001 all stations between Worcester and Framingham will be constructed and operational, which gives rise to the prediction of a steep reduction in parking demand in Framingham. However, the FEIR indicates that average weekday boardings by 2001 will decline from current rates to 742. However, even at this rate the Town would continue to experience a deficit of approximately 53 parking spaces if the spaces in the north wye were constructed, as was envisioned in the Phase 2 plan for the Framingham Station. Resistance to the construction of new stations and the present increasing ridership are strong arguments that parking demand in Framingham will not diminish. Consequently, we ask that the MBTA assist the Town to obtain two easements from Conrail. The first to provide for a landscaped path across the North "wye", for access to existing parking in the Pearl Street municipal garage to promote this facility's use. This pedestrian pathway should be aligned with the proposed pedestrian overpass to be constructed in conjunction with the Station. A second easement is requested that would provide for a pedestrian connection to the Franklin Street extension to provide access to the MBTA parking lot. Finally, we ask that MBTA assist the Town to secure the rights from Conrail to construct parking in the north wye as was envisioned in Phase 2 of the Station plans. 8

Thank you for the opportunity to provide comments and please ensure that the Town is apprised of your determination with respect to this critical project in Framingham.

Sincerely:

David M. Kutner, AICP
PLANNING DIRECTOR

cc: Board of Selectmen
Patrick Moynihan, General Manager, MBTA
Congressman Edward Markey
Senator David Magnani
Representative Barbara Gray
John Stasik, MBTA CAC Framingham Designate
Kathy Bartolini, Metrowest Growth Management Committee

Comment Letter No. 17

TOWN OF WESTBOROUGH
MASSACHUSETTS

BIRTHPLACE OF ELI WHITNEY

BOARD OF SELECTMEN

TOWN HALL
34 WEST MAIN STREET
WESTBOROUGH, MA 01581-1998
TEL. (508) 366-3030

96-246

May 16, 1996

RECEIVED
JUN 7 1996
MEPA

Alan M. Tuttle, Chairman
Millbury Board of Selectmen
127 Elm Street
Millbury, MA 01527

Dear Chairman Tuttle:

At its meeting of May 14, 1996, the Westborough Board of Selectmen voted unanimously to support the Millbury Board of Selectmen's choice in siting the MBTA station proposed for your Town. The Westborough Board of Selectmen feels that the responsibility for this location should be heavily influenced by the local community where the siting is to take place. 1

The Town of Westborough intends to work closely and cooperatively with its neighboring towns to see that the station sitings are done in an orderly fashion.

If you should have any questions or concerns on this issue, please do not hesitate to contact Selectman Charles Kelliher, who is also the Chairman of the Westborough MBTA Phase II Committee. He may be reached at (508) 357-4629.

Sincerely,

Joan M. Bentley
Chairman
Board of Selectmen

CC: MBTA Phase II Committee

JMB/mah

Comment Letter No. 18

Town of Ashland, Massachusetts

101 Main Street, 01721-1191

Fax (508) 881-0102

RECEIVED
JUN 11 1996
MEPA

6 June 1996

Ref#588

Ms. Trudy Cox, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Attn: MEPA Unit

Re: EOEA #9154
Worcester Commuter Rail Extension Project

Dear Secretary Cox:

I have read, with interest, the Final Environmental Impact Report for the referenced project. While the report particularly deals with the Millbury Station, Grafton Station, and Railroad Operations, there are references to impacts along the route, specifically Ashland.

It is these issues about which I am concerned and have prompted my writing. There will be a significant impact to Ashland and its residents: to wit,

1. **VIBRATIONS** – With additional trains traversing the corridor, the impact on the residents along the corridor will be significant. The report does not provide any mitigation measures for vibration. (1)

2. **SOUND/NOISE** – According to the town's sources, additional trains will cause additional noise both from the trains themselves and from the whistles they blow at Ashland's two at-grade crossings. The report indicates that there are no residences within the 25 foot noise impact distance. (See table 5.2-2) However, it fails to recognize that there are well over 100 elderly housing units immediately adjacent to the railroad right-of-way many of which are no more than 50 feet from the edge of the right-of-way. And while the impact may not affect any additional homes, the impact on the existing homes will increase significantly. No mitigation measures are stated. (2)

Comment Letter No. 18

Ms. Trudy Cox, Secretary
Executive Office of Environmental Affairs
EOEA #9154
6 June 1996
Page 2

Ref #588

3

3. TRAFFIC – Due to the increased frequency of the use of the corridor through Ashland, there will be increased closures of the two at-grade crossings which will negatively impact the traffic flow pattern through the center of town. No mitigation measures are indicated to resolve this problem.

Hopefully, these issues which affect the residents of Ashland and their quality of life will be addressed in the FEIR that deals with Ashland, Southborough, and Westborough. However, since the issues are raised in the subject FEIR, a response for the record seems appropriate.

Please include consideration for the above and Ashland in your certificate issued under the referenced EOEA #9154.

On behalf of the Ashland Board of Selectmen and the residents of Ashland, I would like to thank you, in advance, for your anticipated assistance in this matter.

Yours very truly,

Dexter P. Blois,
Town Manager
(508)881-0100

cc: James Eng, Project Manager, MBTA
Kathleen Bartolini, MetroWest Growth Management Committee
Ashland MBTA Advisory Committee
MBTA Citizens Advisory Committee

DPB/

Comment Letter No. 19

Town of Southborough

PLANNING BOARD

SOUTHBOROUGH, MASSACHUSETTS 01772

June 7, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

RECEIVED
JUN 11 1996
MEPA

Attn: Janet Hutchins, MEPA Unit

RE: EOEA #9154

In response to the above referenced EIR we would like to make the following brief comments:

- We continue to support the concept that all five intermediate stations on the Worcester extension are inter-related. Just as we believe the Westborough-Southborough-Ashland stations should go on line together to minimize impacts to any one community, Millbury and Grafton should be similarly linked. (1)

- We support the concept of the Route 85 railroad bridge replacement which will allow for improved site distance and a sidewalk linking the north and south sides of the tracks. However, the "recent decision by the MBTA" to eliminate the pedestrian overpass and route commuters via ramps and sidewalks under the Route 85 bridge is not endorsed by the Town at this time. We applaud the MBTA for being responsive to our concerns regarding the appearance of a pedestrian overpass, but we question the practicality of commuter circulation from one side to the other under the proposed plan. An underpass, as we understand is being proposed at the Weston station, still seems a reasonable solution at this location. We will address this issue in greater depth as part of the Final EIR for the three easterly stations. (2)

- While we agree that the Route 85 bridge is not listed on any historic register, we have continually expressed our concern that this bridge is the southern entrance to Southborough and should be restored to its current appearance with stone facing. In

Comment Letter No. 19

3 response to the potential historic significance of this bridge, this FEIR states "the Route 85 bridge in Southborough warrants discussion". We feel that a granite/stone finish to this bridge would be appropriate in this historic mill section of Southborough and would bring an end to further needed discussions on this subject.

4 We are still somewhat unclear on noise and vibration impacts to residents and businesses in Southborough and reserve the right to comment in more detail on FEIR dealing with the Southborough station.

Thank you for considering our comments.

Yours truly,

Charles E. Gaffney

Charles E. Gaffney
Chairman

CEG:sb

Comment Letter No. 20

THE TOWN OF SOUTHBOROUGH

BOARD OF SELECTMEN

Town House Box 9108 Southborough, MA 01772-9108 Tel [illegible] Fax [illegible]

RECEIVED
JUN 11 1996
MEPA

June 7, 1996

Trudy Coxe
MEPA Unit, EOEA
100 Cambridge St., 20th floor
Boston, MA 02202

Re: EOEA No. 9154
Worcester Commuter Rail Extension Project, Final Environmental Impact Report, Millbury Station, Grafton Station, Railroad Operations

Dear Trudy:

We offer the following comments on the above referenced report.

Several stations are proposed along the MBTA line. This report covers the first phase of local stations, specifically in Grafton and Millbury and the terminus in Worcester. Later this year, the MBTA will be filing another EIR to cover the second phase of local stations proposed for Ashland, Southborough and Westborough, with additional work at the Framingham station.

It is our understanding that officials in all three communities (Worcester, Grafton and Millbury) are generally supportive of the MBTA proposal for stations in each community, but that some opposition is being raised by some residential abutters to the stations. This is to be expected, and it is common to other stations proposed along the line (Ashland, Southborough and Westborough).

For example, the following complaints raised by some people at Millbury are common to ALL phase two stations: many out-of-town or "Regional" riders coming to local station, increased car traffic and congestion on surrounding roads, lack of visibility of parking lots or platforms from major roads (raising concerns over vandalism, drug dealing, etc.), noise impact from trains on nearby houses, etc. The point is that ALL local stations will have these problems. For example, in Southborough, only 25% of station ridership will be Southborough residents, and every one of the other problems at Millbury will also be experienced at our station.

Comment Letter No. 20

Page two

1 Therefore, the issue is not that these conditions exist, but that every reasonable effort is being made to mitigate them, and that the mitigation be consistent across all stations, in a regional solution.

2 Accordingly, it is the policy of the Board of Selectmen of the town of Southborough, (and we believe of Ashland and Westborough as well), that approval by this board to a station located in this town will be contingent on there being stations built at ALL other sites proposed by MBTA (including both Grafton and Millbury): This is the only way to ensure that each town bears its "fair share" of the regional impact. If one station is dropped, then the other stations must pick up the overflow traffic and carry the load for the missing station, which would be fundamentally unfair.

3 The only justification for dropping a station would be if the environmental impact at that station was uniquely severe and therefore unacceptable from a regional perspective. We see no evidence of any unique impacts at the stations which have been studied in this report.

Very truly yours,

William J. Christensen
Chairman, Southborough Board of Selectmen

cc: Jim Eng, MBTA

Comment Letter No. 21

CITY OF BOSTON
THE ENVIRONMENT DEPARTMENT

Boston City Hall, Room 805 • Boston, MA 02201 • 617/635-3850 • FAX: 617/635-3435

June 7, 1996

RECEIVED
JUN 10 1996
MEPA

Trudy Coxe, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, 20th Floor
Boston, MA 02202
Attention: Janet Hutchins, MEPA Unit

Re: Worcester Commuter Rail Extension Project-Millbury Station, Grafton Station, Railroad Operations
EOEA #9154-Final Environmental Impact Report

Dear Secretary Coxe:

The City of Boston Environment Department has reviewed the above referenced Final Environmental Impact Report (FEIR) and hereby submits the following comments.

The subject FEIR addresses Millbury Station, Grafton Station and Railroad Operations for the Worcester-Boston commuter rail service. Service between Framingham and Boston was reinstated in September 1994 with three round trips per workday and is slated to increase to 10 round trips per workday in December 1996. Although there are presently no operations on weekends, the FEIR indicates that the Massachusetts Bay Transportation Authority (MBTA) has received numerous requests for such service and it may commence as early as January 1997.

The FEIR concludes that ballast mats, floating slabs and trenches or underground barriers are not cost-effective mitigation measures for vibration. A wheel and rail (track bed) maintenance program is identified as the sole method for mitigating this effect. In addition, the cost/benefit criterion for noise mitigation allows $2,400 per dB/dwelling and is applied to the first floor only. As the FEIR does not address corridor-wide noise and vibration levels and mitigation as we had requested in our March 8, 1995 letter on the Draft Environmental Impact Report (DEIR), we can only assume that this is a blanket policy for the entire line. We note that with the proposed Basic Service, the earliest trains will pass through Boston neighborhoods before 7:00 am and the latest after 11:00 pm, both leaving and arriving at South Station. Residents will be sleeping at those times, many on floors above the first. In addition, the multi-unit dwellings that form the bulk of our urban housing stock will have complete living areas on each floor. How does this mitigation policy takes these issues into account? 1 2

Comment Letter No. 21

3 On a related issue, we must once again object to the use of the Federal Transit Administration (FTA) standards for determining exposure to adverse noise impacts, and hence eligibility for mitigation, as unfair to highly developed urban areas. We believe that urban residents along the corridor will be unduly impacted and unable to obtain noise mitigation. We request that an absolute residential standard of 65dbA L_{DN} be adopted. In addition, we request that a noise and vibration monitoring program be initiated corridor-wide to assess the effectiveness of the equipment and rail maintenance as mitigation measures and that several urban locations in Boston be chosen as monitoring sites.

4 Despite the MBTA's response to the DEIR comments of the Boston Redevelopment Authority (BRA), we believe that this is an ideal time to examine use of Yawkey Station as a means to increase rail ridership, decrease automobile use and maximize the air quality benefits of this project. Rail passengers from the west who work in the Longwood Medical Area (LMA) and Fenway must bypass Yawkey Station and use another transit mode to return to that area from a point east. This extra transfer certainly decreases transit use and it seems likely that such a station can only help the Commonwealth meet Federal air quality standards. Planning for a direct connection to the proposed circumferential transit service in the Kenmore Square area will likewise assist in meeting the goals of the State Implementation Plan (SIP).

5 In closing, we again request that any increase in commuter rail trips between Framingham and Boston in excess of 32 workday trips require a Notice of Project Change.

Thank you for the opportunity to offer comment.

Sincerely,

Lorraine M. Downey
Director

WORCCMRL.doc.LMD:MTZ.mtz

Comment Letter No. 22

KEITH K. DAVISON
37 Hastings St., #206-ME
West Roxbury, MA 02132
(617) 327-5761

RECEIVED
JUN 1 3 1996
MEPA

June 7, 1996

Trudy Coxe, Secretary, EOEA
attn: MEPA Unit
100 Cambridge St., 20th Floor
Boston, MA 02202

fax 727-2754

Re: EOEA #9154 Worcester Commuter Rail FEIR #2 - Millbury, Grafton, & Operations

This whole project has never made sense and still doesn't, but proceeds regardless. The starting point for fair bus alternatives would be to consider the best bus service/system that might be provided for the same amount of money as will be spent on rail. (The fare might approach zero.) How many riders would it attract? (1)

In modern times we have yet to arrive at a decent design for neighborhood/town train stations; it's a shame to see investment in ugly, awkward, inefficient, isolated, non-intermodal, low-functionality implementations.

No recent material is provided for CAC meetings, proceedings or opinions. (2)

Worcester airport is dying, despite continuous investment. Both Boston and central Massachusetts need there to be a Worcester airport that works, to relieve Logan and serve other parts of the state. Perhaps consideration should be given to relocating to the east side, conveniently accessible via commuter rail. (3)

The vegetation management plans presented do not represent a serious consideration of all potential alternatives for minimizing adverse environmental impacts. They are merely a rote justification/repetition of "business as usual" reliance on broadcast poisons.

- Absent from the YOP is any review or discussion of the experience with the previous year's plan or total quantities of herbicide actually used.
- Without quantitative tracking there can be no effective effort to minimize quantities.
- No innovative pilot plans are proposed to explore new water/steam techniques of vegetation suppression. (4)
- There is no mention of vegetation/track bed BMPs. Vegetation can only grow if debris accumulates in the bed. No plans are presented to exclude, remove, or clean the bed of such debris.
- The text of all VMPs should be available via Internet. Current review procedures do not effectively inform and involve the public.

The claim on p.2-18 that the T is in sound financial condition, with the capacity to "make improvements required by the American with Disabilities Act" at least through 2015, is quite amazing in light of the T's very poor performance investing in and meeting disabled needs to date.

The Millbury Station locus map (fig. 3.1-1) suggests poor pedestrian-access from the adjoining residential area. (5)

No secure bicycle parking storage lockers are proposed; no comprehensive effort has been made to maximize this mode choice. In general, no effort has been made to maximize pedestrian access and usage of proposed stations. This may not conform with Section 61 requirements. (6)

Keith K. Davison

Comment Letters From Flint Pond Residents et al

-7/+

May 17,1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

RECEIVED
JUN 5 1996
MEPA

Attention: Janet Hutchins
MEPA Unit

RE: EOEA #9154

Dear Honorable Coxe:

We are writing to you in response to the FEIR pertaining to the Millbury Station with access from Route 20. There are many discrepancies within the FEIR which we as a community are addressing (see attached).

At the same time, we feel it is important to set the facts straight. We have only recently been informed about the current proposed Millbury Station site. Needless to say we are shocked and outraged.

Late in 1993, early 1994, the MBTA decided to aid the City of Worcester in refurbishing Union Station. At that time, Millbury announced its intentions to welcome the MBTA with an access off Rt. 122. Since that time, the MBTA has altered its initial plan.

From the FEIR (pg. 3-11) "Opposition to a Millbury site located on the south side of the tracks and accessed from Rt. 122 began after the MBTA formally presented its plan to Town Selectmen. A local citizens committee was formed, leaders of the group joined MBTA Rail Advisory Committee. The committee opposed an access from Rt. 122 and suggested a station on the north side of the tracks and access from Rt. 20. After meeting with the Advisory Committee and analyzing and weighing potential impacts associated with each alternate location, MBTA selected Rt. 20 as the preferred site". In this report, there is no mention of the City of Worcester or its residents. The MBTA decided.

We, the residents of Flint Pond Development in Worcester, learned of the MBTA's Rt. 20 alternate plan from the developer, Mr. Albert Etre. Although the MBTA had been on Mr. Etre's property, he was never informed of the MBTA's true intentions until November, 1995. At that time, Mr. Etre realized the MBTA was planning to put the station on the north side of the tracks with a 3,200 foot long access road from Rt. 20. This access road would wind around the development and lead to a 303 plus space car lot and rail stop on the other side. In the design of the access road, Mr. Etre's property would be taken. Mr. Etre informed the City of Worcester regarding the MBTA's change in plans and then told us in January, 1996.

Since that time, we have had several meetings with Worcester City officials as well as with our state senator and state representatives. At this time we are responding to the FEIR. We believe that the current proposed site for the Millbury Station is a poorly conceived proposal. It does not belong where it is currently proposed. The City of Worcester has a train station, Union Station. The MBTA should concentrate its efforts and dollars into refurbishing that station.

Thank you in advance for your time and attention to this very important matter.

Sincerely,

Flint Pond Residents

train

COMMENTS REGARDING FEIR

1. In light of recent developments it has come to our attention that the MBTA is in serious financial straights. Is the MBTA financially solvent in pursuing a project of this magnitude in addition to other projects currently in progress within the state of Massachusetts?

2. In the FEIR, there is no reference made with regard to contact with or comments from the City of Worcester government or the abutters to the proposed location. By their own admission, the MBTA has designated the RT. 20 access alternative as the proposed Millbury Station site.

Although in the FEIR it states, "the MBTA is working with the City of Worcester and neighbors to explore ways further of limiting any perceived effects," this is not a valid statement.

Furthermore, the EIR NPC Certificate dated January 10, 1996 in Appendix A in the MEPA Correspondence, shows a list of CAC members provided by the MBTA. There are <u>no Worcester members</u> listed. Where is the Worcester representation?

3. From the FEIR: The results of the environmental site evaluation rendered the opinion that although no surface evidence of spills or releases of hazardous materials were detected in the residential and undeveloped areas, oil and hazardous materials may be present within the soil and groundwater at the project site. This is based on the following:

a. The Wyman-Gordon facility is within a half mile of the site.
b. Barrett Centrifugals is located within a quarter mile and upgradient of the site.
c. The use of hazardous materials and oil, predominately paint and oil by Barrett Centrifugals along with the presence of an on-site septic system receiving waste and water from sinks and drains in production areas of the building, presents a potential for hazardous materials and oil to be released to the soil and groundwater via the septic system. The program for exploring this is still in progress and will be completed prior to the final design or construction activities.

   In the final analysis, how will this affect water run-off into Flint Pond and the eventual run-off into Lake Quinsigamond?

4. Other environmental issues that need to be addressed:

   a. The isolated 303 plus space car lot is a potential "dumping ground" for people disposing trash and changing oil in their cars.

   b. Air pollution in the form of auto exhaust produced by cars starting and and engines running poses a threat to nearby residents.

   c. With the clear cutting and destruction of trees and root systems, the natural filter system for water-run-off will be destroyed.

   d. Sensitive receptors have been overlooked and the following needs to be analyzed:

      -the 303 plus space car lot and station will have a negative visual impact on the residential areas, especially to the homes that the station will abut. There will be an invasion of privacy and natural view.

      -the starting and stopping of trains along with the starting of car engines will have a negative auditory impact on the residential area. The MBTA based studies on trains running, not stopping and starting. What is the projected decibel level?

5. Safety concerns should be addressed regarding the location of the Rt. 20 Millbury Station site:

   a. The 3,200 ft. access road is in Worcester. The station and 303 plus space car lot is in Millbury. Who responds during an emergency?

   b. The site is isolated and poses potential policing problems and the potential impact on the local neighborhood. Who responds?

   c. The MBTA has eluded to future growth and expansion of the parking lot and possibly another access road leading to Westborough Street.

   d. The Millbury Fire Department has questioned the MBTA as to where they would obtain water and will there be a secondary access other than Rt. 20 during an emergency situation. The only reference to water in the FEIR is in regard to construction. Oak Pond Well on Wheelock Street is the nearest source located one mile away from the proposed site, on the other side of the tracks. The nearest fire hydrant is located on Westborough Street. Who would supply the water?

6. Accident data on both Rt. 20 and Rt. 122 of studied area should be included with appropriate comparison and analysis.

a. Information from Worcester Traffic Engineering Department report 501 accidents during a three (3) year period from 1991-1993. 275 of these accidents occurred at intersections on Rt. 20 from Massasoit Road and Rt. 20 intersection to Edgemere Blvd. and Rt. 20 intersection. Within this two mile stretch is the proposed access road. This number (275) only reflects Worcester Police Department records and does not include state police investigations or records from towns in close proximity such as Millbury or Shrewsbury. Another intersection in this vicinity would increase the number of traffic accidents.

b. Within a 2 mile stretch of the proposed access road on Rt. 20 (1 mile on either side of access road), there are frequent changes in the number of lanes (from 5 down to 2), numerous entrances and exits and no posted speed limits.

c. There are three major trucking companies in the immediate area of proposed access road. These trucks frequently make illegal left turns to travel west on Rt. 20 due to the fact that there is no alternate route.

7. A proper review of all conditions approved through the M.E.P.A. process of Super Stop and Shop proposal (presently Big Y) should be addressed with any intended changes/amendments properly noted.

8. MBTA used the same traffic statistics and information from research for Rt. 122 access and applied it to the Rt. 20 alternate. It is the same study.

The only information changed was that pointed out by Flint Pond Residents.
EXAMPLE: The D-EIR traffic study neglected to mention Sunderland Road /Rt. 20 intersection which is closest (300 ft. or less) to access road.

9. The intersections in the immediate area of the proposed signalized intersection of the Millbury Station's access road and Rt. 20 should be included as studied intersections.

These should include the intersections of:

a. Westborough St, Sunderland Rd. and Rt. 20.
b. Lake Avenue and Sunderland Rd.
c. Grafton St. and Sunderland Rd.
d. Edgemere Blvd. and Rt. 20.
e. Massasoit Rd. and Rt. 20.

10. The intersection of Blithewood Avenue and Grafton Street is scheduled for signalization in the 1996 construction season. The impact of signalizing this intersection should be studied and projected in the traffic study.

11. Review the presumptions of the traffic patterns on distribution map 6.2-4 "Build All Stations" scenario (see enclosed). Explanations need to be given for:

-Auburn, Charlton and Oxford commuters travelling Rt. 20 rather than using the Mass. Pike and exiting at Washington Square in downtown Worcester.

-Boylston commuters using the Millbury Station rather than downtown Worcester.

-No Shrewsbury commuters using the Rt. 20 Millbury Station.

12. A comparative analysis of all residential homes and lots impacted by current proposal and the first draft EIR of 1993 should be developed. Specifically speaking, the number of Worcester and Millbury residents directly affected by each proposal should be studied.

13. There was never a Worcester resident or Worcester City official listed on the Citizens' Advisory Committee roster.

KEVIN M. MALONEY
108 Westborough Street
Worcester, MA 01604

Telephone (508) 757-7255

21 May 1996

Letters to the Editor
Telegram & Gazette
Box 15012
Worcester, MA 01615-0012
Fax: 508 793-9281

"Cutting off your nose...
Opposition to rail station self-defeating"
Published May 19, 1996

Dear Editor,

Poor politics begets poor engineering and apparently poor Editorials.

I am one of those "few people with fictive negatives".

The area residents and the City Council agree effective and efficient rail transportation is necessary. Your "Opinion" is flawed. Your lack of understanding fails to address the real concerns of Flint Pond area residents. (A small incursion now and uncontrolled growth later.) The objections of the City Council is not "vainglorious political posturing". The Council's is responsible and mindful of the long term growth of the region. (Who can predict, with any accuracy, what level of activity this station will support five or ten years hence?)

Two proposals are under consideration for the Milbury MBTA rail station. Both plans position the station at the same location. The difference in the proposals is the origin of the access road. The real issue emerges, is this a Milbury stop or a de facto Worcester station? MBTA estimates indicate that only 41.6% of riders would originate in Worcester.

The MBTA mandated a station at Milbury . They did an excellent job with site selection and engineering. The location on Route 122 (Grafton Street) is directly opposite the Milbury Mass Turnpike entrance. This intersection is approximately 1,000 feet from the proposed station site. This site is a former rail road siding and is zoned industrial: Some Milbury residential property would be affected.

Milbury residents rejected the original MBTA proposal. The MBTA needed a Milbury station and they needed it quickly. They could not afford the delays caused by another rejection. The Worcester City Council was not notified. The MBTA used data developed before the building of the Flint Pond Village housing development. Traffic studies do not favor an access to the site through Worcester property. Their fall back position resulted in this Mickey Mouse access road. This 3,200 foot road would originate on a heavily traveled section of Route 20, disrupt an existing industrial area then meanders through a newly constructed residential area.

Route 20 is already congested. The Environmental Impact Report does not address the impact of increased traffic resulting from the construction of the interchange of Route 146 and the Mass Pike at Route 20. Earlier traffic studies rejected the installation of a traffic signal at the proposed access road location. Long term engineering studies were ignored for short term political expedience. .

Worcester County needs convenient and accessible rapid rail transportation. We need to get it right the first time. The only routes to the Worcester Airport run through a labyrinth of streets in residential neighborhoods. Do we really want to repeat that experience or do we want to connect this rail station directly to the Mass Pike and Route 122 (A bus link could connect riders to points west, i.e. the Brookfields.)

Growth in this area will continue. The residents of Milbury have valid concerns for their community. We can implement an excellent plan now and reap the benefits for the future or yield to this poorly concocted Route 20 access road proposal and suffer endlessly. Place the rail station access road opposite the Mass Pike entrance and accept State Highway funds to improve Route 122. Deal with a small change now or leave a large frustrating mess for others to suffer through later.

Kevin M. Maloney

cc: Councilman Paul Clancy
Senator Matthew Amorello
Representative Vincent Pedone
Mr. James Eng, MBTA
Flint Pond Residents

ETRE BUILDERS
17Crestlan Drive
Worcester, MA
01604
(508)755-9409

Secretary Trudy Cox
100Cambridge Street
Boston, MA 02202

Dear Secretary Cox:

As the builder of , Flint Pond Village, located off Rt. 20 in Worcester, MA and abutting the proposed MBTA rail station, I am strongly opposed to the station and would like to state my concerns.

The history of this subdivision evolved in the early 90's, with the first sales of homes on Flint Pond Road , the development expanded with the addition of Etre Drive. Homes marketed in this residential location reflect on, the luxury of a country setting, yet still a part of the city of Worcester. To date thirty homes have been built, with an expected additional fifty in the near future.

The serenity of this quiet neighborhood could and will change with the proposed rail station site, facts that will impair this serene environment, will include the following;

* Crime, do to a secluded attainable parking fauclity.
* Environmental pollution via, trains haulting, idling, departing.
* Environment removal of greenery which presently shields track area.
* Polution of Flint Pond, from run off drainage.
* Dangers and the enticement of the train ,with present child population of thirty plus, future census of one hundred plus neighborhood children.
* Traffic concerns involving the access road and route 20.
* Revenue received via taxes; monies will be dramatically reduced if development is stalled do to, the negative concerns prespective buyers will have.

So often of late, we are encouraged by city and state officals to utilize the downtown area, why then push for commuter ridership via Worcesters' outskirts, this is not conducive to current philosophies.

In closing, I wish to convey an invitation to you, to view the site, discuss events in the hope to bring this situation to a quick closure, one that will support the growth of this neighborhood.

Sincerely,

Ronald J. Etre

May 30, 1996

Dear Ms Cox,

We are residents of Flint Pond Village and are writing to you to express our concern with the MBTA in their plan to build a train station next to our neighborhood.

The neighborhood at Flint Pond Village is very family-oriented. Most of the residents plan to stay and raise their families here.

We are concerned that the new station will create more traffic, noise, pollution, and above-all more risk for the overall safety of our children

It seems that with Union Station only four miles away — the MBTA should take a hard look in determining if building a station so close in proximity is worth the time, effort, and money.

Any help that you can provide us concerning this issue would be appreciated.

Sincerely,

Scott Smith Stella Smith

Scott Smith, Stella Smith

55 Etna Drive
Worcester, MA 01604
May 27, 1996

Dear Secretary Cox,

I would like to take the opportunity to express my concerns about the proposed Millbury Train Station.

The proposed location of this station is on Millbury's side of the tracks but the parking lot is approximately 150' from some of the homes on Flint Pond Road. This site was decided with no prior notification of intent to the residents of this neighborhood.

This station will have an environmental impact to this neighborhood. The water drainage from the proposed parking lot will flow into Flint Pond and eventually will flow into Lake Quinsigamond. Currently efforts are being made to improve the water of Lake Quinsigamond and this drainage will have a negative impact. The reason I chose to build in this area was the country-like setting within the city limits of Worcester. If this parking area is built, the cutting of the trees would destroy the natural sound barrier already in place also it would destroy the flint system which is a natural filter system for the water run-off.

Traffic and safety are two other concerns related to this train station.

According to the FEIR (1989) for Stop & Shop (presently the site of Big Y), the State said there would be no intersection at this location on Rt. 20. Why is it okay four years later to have an intersection at this point. The driving safety has not improved over the last 4 years, does the State change the rules to justify their actions.

The site for the proposed Millbury Station is isolated and could lead to potential policing & firefighting problems. The Millbury Fire Chief is concerned about availability of water during an emergency. With the train station in Millbury but the parking lot in Worcester who will respond to an emergency?

There is also a possibility of another access road off Westboro Street in addition to the Rt 20 access road. This is a very young neighborhood with a lot of young children who live here. This will create a lot more traffic in this neighborhood but make it more dangerous for the children who live and play here.

Route 20 is a heavily travelled highway, anyone from Worcester can tell you this is a dangerous road which has seen too many accidents. If the MBTA did their homework the City Police dept could provide them with an accurate account. I do not believe the number of accidents has decreased.

I do not understand the MBTA's rationale in clustering these rail stations. Worcester's station would be 4 miles from the proposed Millbury station which is 3 miles away from the Grafton station. Isn't this a waste of taxpayers dollars. Also, how will the MBTA attract commuters if the train service is constantly interrupted. I thought the idea for commuter rail service was to offer a better and more efficient way to get into Boston.

If Millbury wants this train station they should take everything that goes along with it, the train station, the access road, the parking lot and the maintenance and policing of the area. Why should Worcester and this neighborhood in particular have to share in their headaches?

In closing I am not in favor of this train station in this Millbury site and I hope and alternative site will be found.

Thank you
Mary Ann Mazzo

Donald and Donna Pitman
17 Flint Pond Road
Worcester, MA 01604

Mar 11, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202
RE: EOEA #9194

Dear Secretary Coxe:

We are writing to you today concerning the proposed MBTA Train Station in Millbury. My wife and I live at 17 Flint Pond Road in Worcester with our two sons. We strongly oppose the proposed Millbury station site. We are very concerned with the MBTA's handling of this situation. Flint Pond is a new subdivision that has been in development for six years, yet the subdivision only recently was shown on the proposed site plans.

In fact, with input from the Citizens' Advisory Committee and the Millbury Commuter Rail Advisory Committee (a nine member committee with the majority living in the area of the "original" site), the MBTA changed the site and access route from Route 122 to Route 20 in Worcester. A decision was made to place a train station in our neighborhood yet no one who lives in this neighborhood was notified of these plans by the MBTA or any public official.

The initial project proposed a station off of Rt 122 in Millbury. This site was identified because of its direct and easy access from the Mass. Turnpike. This was viewed as one of the major factors during site selection.

However, a decision was made to relocate the station and have access off of Route 20. Route 20 cannot handle any additional traffic safely. In fact, in the final EIR it states that "the turning movements at the ramp from Westbound Route 20 to Grafton Street in Worcester operate at unacceptable levels." This is due to the substandard road network. A more alarming fact is this conclusion is derived from a traffic study conducted over three years ago. "Unacceptable levels" is a conservative description of this current safety hazard.

Additional issues of concern:

Air quality: C.O. levels done were conservative estimates only. If the parking lot is expanded as suggested would happen, then the levels would be even higher. There are a high number of children in the area, any pollutant brought into this area is unacceptable.

Noise pollution: An increased number of trains with frequent stops and starts as well as cars coming and going would adversely affect our quiet, country-like neighborhood.

Visual affect: The station would be an eyesore to our neighborhood. The majority of the houses in this neighborhood are two stories and tri-levels. No amount of fencing or shrubs could eliminate the station from our view.

Policing problems: We are concerned about the potential impact on the neighborhood in the form of policing problems. The station will be unmanned and isolated.

Water pollution: Two major facilities, Wyman-Gordon and Barret Centrifugals, are located less that a half-mile from the proposed site. We are very concerned about the risk of hazardous materials in the area. In fact, a recent article in the Worcester Telegram stated that State testing was conducted at Flint Pond which showed elevated levels of Mercury and traces of the toxic chemical PCB in fish taken from the pond. Construction of a train station would disturb the landscape and increase run-off which could elevate this problem to dangerous levels.

In closing, the most important consideration has to be the safety of the children. This subdivision is roughly 80% complete and there are over forty children in the neighborhood already. The majority of children are less than five years old. We selected Flint Pond because it is a safe neighborhood to raise a family. We hope you can continue to keep it safe for our family.

Sincerely,

Sat. May 18, 1996

Dear Secretary Cox,

I am writing in regards to the proposed Millbury railway Station which is to be located directly behind my neighborhood located at Flint Pond Village in Worcester.

I recently moved to Flint Pond Village from the town of Millbury where I owned a home in a quiet, neat suburban neighborhood. Seeking a home with more living space and also located in a neat, quiet neighborhood I was quite impressed with my new neighborhood and so made a big move.

It is hard for me to understand why any agency would seek to create a 300 car parking lot and train station just in back of a quiet residential neighborhood when common

sence dictates that other locales would better serve such a need and would not impose themselves on the tranquility of a family neighborhood. I find it most difficult to understand why a more comprehensive search of less "imposing" sites was not undertaken. Certainly someone was not aware of the family neighborhood under construction because if he were he would understand the magnitude of damage that such a station and construction of would ensue.

Not only is the problem of noise and pollution of concern to myself and other home owners but the inherent problems of locating an access road off of a busy and still

dangerous Rte 20 is quite frightening.

In addition, I am concerned with the impact that the access road off of rte 20 will have on the noise, air pollution and serenity of a quiet, neat unspoiled suburban area. Auto emissions will most definitely impact on the homes abutting the access road and on most other homeowners nearby. The thought of additional traffic problems on route 20 which is already plagued with problems is, at the least, frightening.

In closing I would like to state that never before have I written a letter to any company or agency to complain about anything. However, my

husband and I have worked long and hard to afford the comforts of a new home that would give our family more living space and security from the hazards of modern day living such as air pollution, noise pollution and crime. We chose our new neighborhood with care and forethought, never having heard or read about the future construction of a railway station and to my understanding neither had the city of Worcester.

I urge you strongly to consider the impact that such a station and access road will have on a small neighborhood and busy section of route 29. I urge you strongly to consider homeowners, families and

young children who live in this area. I ask that you reconsider entirely the train station and access road and seek a site that respects the rights of homeowners by neither denying their right to tranquil living nor by imposing upon their sense of safety and concern for the health and welfare of loved ones.

Sincerely,

Mr. + Mrs. Charles Kach
28 ETRE Dr.
Worcester, MA
01604

SHARON M. YAGER
33 Westborough Street
Worcester, MA 01604
(508) 752-0710

May 18, 1996

Secretary Trudy Cox
Attn: Janet Hutchins
Executive Office of Environmental Affairs
MEPA Unit
100 Cambridge Street
Boston, MA 02202

RE: EOEA #9154

Dear Ms. Cox and Ms. Hutchins:

It is with considerable concern that I write in regard to the proposed Millbury Station with the access road off of Route 20. I am aware that numerous concerns have already been voiced, and I doubt my concerns are new, but I feel compelled to notify you all the same.

I commuted to work in the Northern Boston area for three years before finding a job locally. I used the MBTA train off Shrewsbury Street on occasion due to car problems and I found it to be a wonderful option. I was thrilled when the service was extended to the Worcester area and felt it had been a long time coming. Unlike some other residents who seem to be opposed to an additional local station altogether, I would advocate for another station, but I simply feel that this proposed location does not make much sense for several reasons.

My first concern is a personal one due to the location of my home. Our house is located toward the end of Westborough Street, about seven houses up from Route 20. The traffic on Westborough Street and especially Route 20 is already a concern, and would only get worse with the proposed station. It is a rare occasion when I can back out of our driveway immediately. There is almost always a car (or worse yet, an 18 wheeler or WRTA city bus) coming or going on the street. Having a small child and one on the way, trying to take walks on our street often frightens me.

Aside from that issue, I also have a serious concern about the access road. It simply seems impractical to have such a long road on Worcester land when the station is in Millbury, and the traffic will be felt by Worcester, not Millbury. The access road creates an entire slew of issues, security, upkeep, etc. among them, which I am sure your office had already heard countless times by now. Unfortunately, I must agree that these are valid concerns.

There must be other location options without such serious issues attached. As unfortunate as it would be to forgo the Millbury station altogether, I also feel that such a decision may be the only option if these issues can not be seriously looked at. They are too important and costly to ignore.

Sincerely,

Sharon M. Yager

Sharon M. Yager

May 17, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Attention: Janet Hutchins
MEPA Unit

RE: EOEA #9154

Dear Honorable Coxe:

I am writing to you in response to the FEIR regarding the proposed Millbury Rail Station with access from Route 20.

I live at 14 Flint Pond Road. I own a home and property that will abut the proposed 303 plus space car lot and rail stop. This rail stop will literally be in my backyard. I will no longer be able to enjoy my privacy. Instead of viewing the woods behind my house, I'll be looking at a high pedestrian foot bridge, two 45 foot long platforms complete with a station canopy and a huge car lot with site lighting at all hours of the night. No amount of landscaping will disguise all of this and the noise that will be associated with it. The MBTA never notified me or my neighbors that this project was going to be constructed in our backyards. How can the MBTA proceed without notifying the abutters?

There are many families with young children living in the development. I am very concerned for the safety and well-being of the children. This site will act as a magnet and draw their attention. What safety features will the MBTA provide to prevent the children from getting in harm's way?

According to the FEIR, the rail stop and car lot will be in the Town of Millbury and the access road will be in the City of Worcester. The site is isolated and far from a main road. This could lead to policing problems. The site should not be divided between two communities. Who assumes responsibility during a crisis?

The Town of Millbury initially agreed to the station. The Town of Millbury should take the entire project - rail stop, car lot and access road from Route 122. The proposed project is now being forced on residents of Worcester who were not given a chance to voice concerns or give any input. Quite frankly, it's not fair.

Sincerely,

Emily Harper

May 17, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Attention: Janet Hutchins
MEPA Unit
RE: EOEA #9154

Dear Secretary Trudy Coxe,

As residents of the Flint Pond Village we are very concerned of the negative impact this commuter rail project will have on our entire neighborhood. Our home is one that will truly be affected by this project because our property line abuts the area the MBTA wishes to build on.

The following items found in the Final EIR are some of the issues causing great concern to our minds.

VISUAL IMPACTS

- The "relatively dense vegetation" the MBTA refers to many times, is mostly made up of, 30 ft to 60 ft top heavy trees. We feel when they begin to excavate the 5 acres of land, for the station and parking lot, (not even including

the access road), a majority of all these trees will be wiped out and we will definately lose this "dense" vegetation the MBTA seems to be relying on to help obstruct the neighborhoods reiw of the station.

We would also lose this vegetation as the seasons change. As soon as fall begins, all the way through the winter months, and even into spring, when the natural growth final begins. Since the growth of the trees is <u>top heavy</u> we will usually be left will tall tree trunks, rather than "dense vegetation!" This means not only will we be able to see the station and parking lot, but also the noise level the train station and parking lot project will be **louder** because we lose this natural sound barrier.

- The MBTA mentions landscaping opportunites around the station, and fencing between the station and the parking lot.

Well, we are also concerned

about the area of the parking lot!
There seems to be no mention of landscaping around the parking lot to hide this eye-sore! And there is also no mention of a fence surrounding the parking lot as a safety measure!

SAFETY

- Since this station would be an unmanned facility, it seems a large parking lot in a "secluded area" would bring in a possibility of a teenage hangout or even crime.

With a high enough fence surrounding the entire parking lot and trees planted around this fence, this could at least help keep out any possible trouble from entering into our backyards and our homes.

A high fence would also provide a barrier for the safety of the children, for not only Flint Pond village but all other neighborhoods in the area, from entering into a potentially dangerous area.

Obviously without fencing in the parking lot, the safety of our homes and children is in question. With trees planted around the fence also, this could help prevent easy climbing into the parking lot, or out of the parking lot!

As residents, who are very against this entire project, feel the statement made in the EIR by the MBTA,

"there does not appear to be any substantial negative effect on this neighborhood."

is completely false. The thought of having a train station in our backyards is about as negative as anything! Thinking about looking out my top floor windows and seeing a train stop is not only negative but is depressing! Being in our backyard would feel as though we lived in a apartment building in the heart of a city with the noise and sight of a 300 car parking lot and train station!

They also made another statement in this EIR,

"... the MBTA is working with the City of Worcester and the neighbors to explore ways further of limiting any perceived effect."

This also is false. The MBTA seems to feel they are building this station because financially it suits their bank books, while neglecting to have a meeting with our neighborhood and actually listen to our feelings about this project.

There are so many other issues that could be brought up in this letter. But as close proximity homeowners, we feel these few issues were very important to be looked into within this Final EIR.

Thankyou for taking the time and reading these concerns, we hope in the end this station will not be approved at this site.

Sincerely,
Laurie Mattero
Laurie Mattero
Tony Mattero
Tony Mattero

Residents of
10 Flint Pond Road
Worcester, MA 01602

5-16-96

To Whom it May Concern,

As a resident of Flint Pond Village I am opposed to the proposed M.B.T.A. train station in Millbury. Its effects on this neighborhood could only be negative.

Some of my concerns are:

1. Traffic safety on Rt. 20
2. Noise from a high volume of traffic close to our homes and engine noise from locomotives.
3. Pollution from exhaust from cars and locomotives
4. An unattended parking lot far removed from the main road is sure to become a hang out at night and an invitation to crime in our neighborhood.

As a Massachusetts taxpayer I would much rather see the money which has been allocated for Millbury go towards the financing of quality stations in Westboro and Grafton and upgrading Union Station in Worcester.

As a commuter, one less stop (Millbury) will get me to my destination sooner.

If the M.B.T.A. is insistant on a station here lets start over so that the people most affected by it have some input as to its location.

Sincerely

Stephen J Stepien
45 Etre Drive
Worcester MA

Date: May 16, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Dear Ms. Coxe:

I am writing to you regarding the Millbury Train Station. As a resident of Flint Pond, I am very concerned about a number of issues concerning this station:

- Possible environmental problems with water run-off from the parking lot and the access road.

- The increased emissions in a residential area from the parking lot and road.

- Traffic congestion on Route 20. The Final Environmental Impact Study used old data to make its recommendations. This study has some serious flaws, from the number of accidents that occur to the fact that our development was not even on the original study.

- Who will be responsible for the fire and safety of the station, Millbury or Worcester? My understanding also is that the Millbury Fire Chief is concerned with the availability of water if there was an emergency.

- Will there be a need for another access road for emergency? More than likely the answer to that is yes. The most likely access then would be to Westborough Street, once again a residential area with many children.

- I also understand from the Environmental study that ridership will not increase if there is or is not a station in Millbury. Why then would one want to spend three plus million dollars with no return?

There was no previous notification to us or to local government officials regarding this site until plans were well in place. I would hope, before any final decisions are made, that you visit the proposed site and see for yourself where this station is to go and where it was originally supposed to be placed in Millbury with access to Route 122.

In my humble opinion, this station does not even need to be built. With Union Station four miles to the west and the proposed Grafton station less than four miles to the east, logistically it would seem to be a waste of money. I personally am not against progress and feel that increasing public transportation is good for both the environment and traffic congestion, but the placing of a station in a residential area when there are other alternatives would be wrong.

Sincerely,

Jack Murphy

Jack Murphy
Resident Flint Pond

13 May 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Attn: Janet Hutchins, MEPA Unit
Re: EOEA #9154

Dear Secretary Coxe:

This letter is written with reference to the proposed Train Station in Millbury, Mass, behind Flint Pond Village. As you may know, Flint Pond Village is a new housing development of single family homes located in Worcester off of Route 20 (Westboro Street). The MBTA wants to locate its newest train station in the back yard of this residential area.

First and foremost, there is a train station less than 4 miles down the road on Shrewsbury Street in Worcester making an additional station unnecessary. In fact, the current station is at a major expressway exit (route 290), making the station very accessible from routes 146, 190, 495 and the Mass Pike. Has anyone done a needs assessment for another train station this close to the current station?

In addition, we have several concerns regarding the proposed location of the station. First of all, if Millbury wants a station why should Worcester residents bear the burden of it. The increased traffic in addition to the current Route 20 traffic should make this an unacceptable site. There are enough tragic accidents on Route 20 now, I can only imagine what the station at this location will do to the traffic situation. Perhaps the fact that 1992 traffic studies from the Millbury Station 122 access were used to plan for the Route 20 access road.

Secondly, the proposed parking area is being planned to be put only 150 feet from the nearest home. Do you think any of these people would have built their new homes in an area with a parking lot for a train station in their back yard? Does anyone care? This is yet another residential area that will be ruined by big business since it seems the little people don't matter.

Third, the added pollution and water run off is not a welcomed addition to a residential neighborhood and children. People move to the outskirts of the city to get away from this!

Lastly, Westboro Street doesn't need any additional traffic congestion. It currently is at the intersection of a shopping plaza and is a major thruway for many trucks and Wyman Gordan employees. An additional access road in this area would cause considerable bottlenecks and accidents.

Once again, the citizens are overridden by decisions that are made without their input. I thought this was supposed to be a democracy - obviously only when it suits their political interests are we involved.

We would appreciate your support and assistance in anything you can do to change the current plans and move this station to a safer location in Millbury or somewhere else down the line.

Sincerely yours,

Peter M. Rodrigues
Kathy Russo

Peter Rodrigues
Kathy Russo
23 Etre Drive
Worcester, MA

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Attention: Janet Hutchins
MEPA Unit

RE: EOEA #9154

Dear Honorable Coxe:

We are writing to you in response to the FEIR on the proposed Millbury Station with access from Rte. 20.

We have been residents of Flint Pond Village for 2 years. When we purchased this property, we were never informed, nor did any plans show that a station was to be developed in our new area. From all the information that we have gathered, the station and 300 plus car lot was to be in close proximity to the Mass Turnpike on Rt. 122 on the south side of the railroad tracks. This is where it SHOULD still go. The FEIR states,"the MBTA is working with the City of Worcester and NEIGHBORS to explore ways further of limiting any perceived effect". This statement is false. The only person we have had any contact with is Mr. James Eng and our State Senator Matthew Amorello and City Councillor Paul Clancy. We have invited the MBTA to meet with us and to walk with us to the proposed site, but this seems to fall on deaf ears.

The location of the Rt. 20 access road is a poor choice. I assume that you have studied the data regarding Rt. 20. This highway has been dangerous for a number of years. Adding another road would only add to the danger. The 3,200 ft access road (which would be very costly) is in an isolated area. Who will police this area, which Fire Department will respond? The MBTA does not have an answer to these questions as far as I can read in the FEIR.

If the parking lot is going to have 300 spaces why does the FEIR allude to adding more when the MBTA expects only 17-30 riders per day using this Millbury station. This makes no sense.

Has the MBTA studied the hazardous problems that could be on this property? The Wyman-Gordon facility is within a half mile of the site and Barrett Centrifugals is within a quarter mile and upgradient of the site. What about water runoff to Lake Quinsigamond? There are so many questions regarding the environment of this particular site that have not been studied or answered to anyone's satisfaction.

We are strongly opposed to the development of this station

and hope that you will listen with reason to the voices of the residents who have bought homes in this area. The neighborhood's future is at stake. Already, people interested in building a home in Flint Pond Village have reconsidered and are taking a "wait and see" attitude.

We feel that a commuter rail is important to the Worcester area, but the MBTA should finish its work on the Union Station project and get that cleaned up and running. Thank you for your time and we would hope that you will come to visit our neighborhood and discuss this issue with us.

Sincerely,

Beverly & Paul Campbell
44 Etre Drive
Worcester, MA 01604

May 12, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Attention: Janet Hutchins
MEPA Unit

Re: EOEA #9154

Dear Ms. Coxe:

I am writing to you to convey my opposition to the proposed commuter rail station in Millbury and the access road to accommodate commuter traffic off Route 20 in Worcester.

If there is to be a rail station in Millbury, I do not feel that Worcester should have to pay the price. As the proposal now stands, Worcester will pay for the MBTA Millbury site with increased traffic; unsitely construction; increased noise, pollution, and public safety issues; and higher automobile premiums. It will bring crime, dumping, and loitering. It significantly impacts residents of Flint Pond Village. Several residents live less than 150 feet from the proposed site, yet not one was approached by the MBTA for input. I bought my home in a neighborhood that offered suburban-type surroundings. The proposed rail station and access road will significantly impact the desirability to live in this neighborhood and will decrease the value of the homes.

Concerning the access road, increased traffic on Route 20 will only exacerbate this already dangerous highway. Recently, a fatal accident occurred not far from the proposed site. In addition, the access road is close in proximity to the Flint Pond Village neighborhood and poses safety concerns, especially for the children at Flint Pond Village. I know of 30 children in this neighborhood, most of which are under the age of 5. I am concerned for their safety not only with regards to the access road, but for the attraction the railroad and parking lot will pose for them. As it stands now, the natural barrier of woods blocks the railroad. If this station goes in, that will be lost.

Stopping and starting of trains along with increased traffic will have environmental effects. Trees that exist to clean up our air will need to be cut down to make way for the proposed parking lot and access road. Water drainage is another potential problem. Millbury and Grafton abut each other, yet each has a proposed site. More stops will delay commutes and some commuters are prepared to drive to Boston if this happens.

The proposed site is located in Millbury and the access road is located in Worcester. I can foresee this being a problem with regards to responding to emergencies. Already there have been two fires located at the tracks, and there was a debate as to who should respond, Worcester or Millbury. It took an inordinate amount of time before someone actually responded. It's

interesting to note, the first time Worcester responded, the second Millbury did. When Millbury responded, they noted that because they have to come into Worcester, it poses a problem for them. It took them 55 minutes and three phone calls to me after I made the initial call before they showed. Once they did arrive, they weren't sure where they were going to get water.

While I'm not opposed to expansion and growth, I believe enhancing sites that already exist is a better solution than creating new sites that have significant negative impacts.

Sincerely,

Enzo P. Simmarano
16 Flint Pond Road
Worcester, MA 01604

May 12, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Re: EOEA #9154

Dear MS. Coxe:

We are writing to you today as residents of Flint Pond Village, Worcester, MA to oppose the current location of the MBTA Station in Millbury, MA.

We purchased our home at 5 Etre Drive a little over two years ago. We looked at many locations in and around the city of Worcester and decided that this development was the ideal location to raise our family.

We have a 12 year old daughter and are expecting our second child in September. We are extremely concerned that placing the station in it's current choice location would not only jeopardize the safety of our children, but of our neighbors children as well.

The final draft of the above referenced FEIR is quite frankly and outrage. How can the MBTA even justify their statement on page 6-1 of, "there does not appear to be any substantial negative effect on this neighborhood". When in fact all of the studies presented in the FEIR are based on information that is outdated.

We would ;like to touch base on the issues that are of our greatest concern:

1. As a bordering development to the 300-500 car parking lot none of the residents were notified of the MBTA's intention to build the station.

2. The site is an isolated area and will be a magnet for teenagers to hang at night as well as transients during the day. Who will respond should there be a police emergency? Worcester or Millbury? If there is a fire, who will respond? Worcester or Millbury? What about the availability of water?

3. The proposed parking lot will only be 150' from the nearest home. What will protect the neighboring homes from the noise of traffic, the commuters themselves, added exhaust fumes, lighting at night? The MBTA did not address these concerns.

4. The traffic data was taken from a 1992 traffic survey done on Rt. 20 and the hours of the study were not of the peak hours for which this station would affect. Due to the size of the Flint Pond Sub-division and the neighboring developments of Crestlan Drive and Point Rock the FEIR traffic study did not even account for the added traffic of the new residents. Let's face it the area has greatly changed since 1992.

We are pleading with you to revise all the flaws in the FIER and once aquatinted with accurate information ask that you revisit this location for the Milbury MBTA Station.

Sincerely,

Jerald P. Dilorio
Deborah Dilorio

May 11, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Attention: Janet Hutchins
MEPA Unit

RE: EOEA #9154

Dear Honorable Coxe:

I am writing to you in response to the FEIR on the proposed Millbury Station with access from Route 20.

I have been a resident in the Flint Pond Development since March of 1994. No information regarding the proposed station to be built on land abutting the development was disclosed to me prior to the construction of my home or during the construction of my home. If this was "public knowledge" as the MBTA claims that it was and has been for the last three years, then this information would have to have been disclosed to me not only as a courtesy, but for legal reasons as well. I was informed of the MBTA's proposed Millbury Station when the developer of Flint Pond Development notified me in January of 1996.

According to the FEIR, a group of Millbury residents opposed the Millbury site on the south side of the tracks with an access from Route 122. Some of those residents along with the MBTA Rail Advisory Committee suggested a station site on the north side of the tracks with an access from Route 20 in Worcester. The MBTA looked into the Route 20 alternate site and selected it. The FEIR also states that one of the driving forces for selecting the site was "general acceptance".

General public acceptance? The statement is absurd. I was never notified by the MBTA that this proposed project was in the planning stages for my backyard. Furthermore, I can't find the name of a single Worcester resident or Worcester City Official listed on the Citizens' Advisory Committee roster. I happened to attend a CAC meeting in early March of 1996. Again, not a single representative from Worcester was present on the committee.

Other comments regarding the FEIR on the proposed Millbury Station site and access road from Route 20:

1. How can something be decided for Worcester, that will affect Worcester, without Worcester representation and input? This is unfair. It is obvious that the process used by the MBTA Rail Advisory Committee to select a site is seriously flawed.

2. In the February 7, 1996 CTPS letter to James Eng regarding Alternative 10 - The elimination of the Millbury Station does not result in loss of ridership. The potential riders would get redistributed to Grafton or Worcester.

   Does it make economic sense to spend 3.3 million dollars to build a new station when the Worcester Station is less than 6 miles in one direction and the proposed Grafton Station is less than 4 miles in the opposite direction?

3. An environmental site evaluation was performed for the proposed Millbury Station to determine if the presence of hazardous materials or oil exists. The results rendered the opinion that hazardous materials and oil could be present in the soil and groundwater.

   When will the results be made public? What is MEPA's position should the results prove hazardous materials are present?

4. There are safety issues that can't be ignored and must be addressed:

   a. The access road is in Worcester. The parking area and rail stop is in Millbury. Who responds during an emergency?

   b. The site is isolated. The potential for policing problems exists.

   c. What safety features has the MBTA designed to secure the platform and tracks to keep the children living in the development out of harm's way? This site will surely act as a magnet to the young children living in the area.

   d. It appears that the MBTA used the same traffic study in both the preliminary draft EIR and in the current FEIR. The numbers haven't changed. Major intersections of the traffic study are missing. Accident data for Worcester in the area of access on Route 20 is inaccurate.

5. What is the acceptable noise level for homes that will abut the lot, station and access road? Studies were done with trains rolling. What about studies done on the noise levels of trains stopping and starting?

6. Exhaust emissions are worse with slower speeds. This certainly would pertain to the 3,200 foot long access road that will wrap around the development, and the 303 plus space car lot that will abut the development. This will directly affect the air quality of the development. What are the projected levels of CO?

In closing, the Millbury Station does not belong on the north side of the tracks with a Route 20 access. In this case it is not a Millbury Station, but rather a Millbury/Worcester Station and Worcester was entirely left out of the planning. To impose the current proposed station site with a Route 20 access on Worcester, without Worcester's input, is grossly unfair. The process was flawed from the very beginning.

The proposed Millbury Station site with access from Route 20 should be dropped from the rail extension project.

Sincerely,

Laurie A. Murphy

Laurie A. Murphy

May 10, 1996
8 Flint Pond Road
Worcester, Massachusetts 01604

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, Massachusetts 02202

Attention: Janet Hutchins
MEPA Unit

RE: EOEA #9154

Dear Secretary Coxe:

I am Victoria A. Pellegrino, 8 Flint Pond Road, Worcester, and I am very concerned regarding a possible land taking by the M.B.T.A. to construct a train station with a parking lot that will hold 300-350 cars which will be located almost directly in my back yard.

My home is only four and a half years old, which is one of the oldest ones in this brand new beautiful, country type area. When I chose to build my home I chose this area because it was a fairly quiet area with proposed new homes to be built and the fact that my lot abutted the woods which was very private for me. My home is presently assessed at $118,000 with the Assessor's Office. My home cost me well over $180,000 to build, furnish and landscape. If this train station is approved I'm sure all the properties in this whole area will greatly depreciate in value. I shudder to think how much or how little I would be able to sell my property for.

I understand the proposed parking lot will only be approximately 150 feet from the back of my property. This will cause a great deal of excess noise pollution, exhaust pollution, noise from trains starting and stopping, people making excess noise in the parking lot, not to mention all the debris and dumping that goes on at every single train stop there is. (I have seen this with my own eyes while taking train trips myself, every train stop in any town or city that a train stops at is a most disgusting filthy site, and I certainly don't want to see this in my back yard, would you?). I also know this would greatly increase the chances of vandalism of our neighborhood, since train station parking lots seem to attract such delinquents. I highly suggest that other sites be considered, closer to the entrance of the Massachusetts Turnpike, perhaps on Grafton street, where it is commercially zoned and there are many open lots available there, without brand new, high quality homes that are only several years old.

I don't know how far along this project is or what I, as a home owner in this area, can do to object to this building of a train station and parking lot behind my home, but I would like to have the same opportunities to object to this proposal, just like the people in Millbury did.

I have read through a copy of Section 6.0 of the FEIR pertaining to the Millbury Station and I have the following comments:

Regarding traffic and safety issues, it seems to me there are some flaws in the FEIR regarding traffic studies, since the MBTA used 1992 data from the Millbury Station Rt.122 Access to plan the Millbury Station Rt. 20 Access, I think this data should be updated to use more current statistics on traffic in this area. I travel on Route 20 every day to get to my job which is only

four miles away, and three mornings out of five I sit in bumper to bumper traffic on a quarter mile stretch of Route 20 for at least fifteen to twenty minutes. I think by adding an access road from Route 20 is going to make traffic more unbearable in the morning commute for everyone.

The site for the proposed Millbury Station is so isolated and will most likely cause potential policing problems as well as firefighting problems. If the Station is located in Millbury and the access road is in Worcester, who would be responsible during an emergency situation?

If this proposed Millbury Station is placed on this site there will be cutting and destruction of trees which will destroy the natural filter system for water run-off and also destroy the natural sound barrier, which concerns me very much since my property backs up to this proposed Millbury station.

The FEIR states, "MBTA is working with City of Worcester and neighbors to explore way further of limiting any perceived effects." This is not true. The entire proposed project was a complete surprise to me and everyone in the Flint Pond Road area. There have been no meetings or contact with the MBTA with me or anyone in this area. Since my back yard will face this proposed Station, if it should go through, I would like the courtesy of meeting with someone from the MBTA so my concerns and questions can be addressed.

Sincerely,

Victoria A. Pellegrino

Victoria A. Pellegrino

KEVIN AND GAY PARKER
8 Etre Drive • Worcester, MA 01604 ☎ 508 792-3126

May 7, 1996

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

RE: EOEA #9154

Dear Secretary Coxe:

As a resident of Flint Pond Village in Worcester, I am concerned about the location of the proposed Millbury MBTA Station and the effect it will have on my neighborhood. I also have some concerns with the FEIR recently filed regarding the site for the station. My concerns with the report are as follows:

- Water run-off from the proposed 300 space parking lot will flow in to Flint Pond and eventually make its way to Lake Quinsigamond. This run-off will surely contain spilled motor oil, anti-freeze and possibly diesel fuel.
- There are flaws in the FEIR regarding traffic studies. The MBTA issued 1992 data from the Millbury Station Rt. 122 Access to plan the Millbury Station Rt. 20 Access. I urge that current data be used to support the proposal.
- The site for the proposed Millbury Station is isolated and could lead to potential policing problems as well as fire-fighting problems. The Millbury Fire Chief is concerned about availability of water during an emergency.
- The proposed parking area will be 150 feet from the nearest developed parcel and 350 feet from the residence on that parcel. This jeopardizes the privacy that we enjoy and look forward to every day.
- The FEIR states, " ... the MBTA is working with the City of Worcester and neighbors to explore ways further of limiting any perceived effects." **THIS IS A LIE!** The entire proposal was a complete surprise to us and we have not had any contact from the MBTA.

I am all for commuter rail service connecting Worcester to Boston. Such an addition can only give our city a much needed boost. I am opposed to a train station placed 150 feet from our backyards. The MBTA needs to put more thought in to their selection process. I urge you to fight for placement of the station somewhere else where it will have a lesser impact on the environment and our neighborhood.

Sincerely,

K Parker

Kevin Parker

P

Trudy Coxe - Secretary
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, Massacusetts 02202

Attention: Janet Hutchins
MEPA Unit

RE: EOEA #9154

We are writing to you in response to the MBTA proposed Millbury station.

We would like to take a few minutes of your time to address a few of our concerns. The neighborhood of Flint Pond Village is a pristine one with beautifully well-constructed homes in a setting that is far and few between in the Worcester community, with many families with children. We purchased our home, which was one of the first in the development, with sound foresight that this neighborhood would not be attached to a commuter rail station, which we are **ADAMANTLY OPPOSED TO** for reasons of:

- the city council members of Worcester nor the abutting neighbors to the proposed site were *never* notified!
- the flaws in the FEIR regarding the 1992 traffic studies.
- the proposed site is isolated and could lead to potential policing problems as well as fire fighting problems. The Millbury fire chief is aware and quite concerned about water availability during an emergency.
- the great mistake lending to another possible access road, in addition to Route 20, would flow into Westboro St.

We could write on and on about other potential problems that might arise from this site, but we'll stop here, realizing that all our neighbors may have covered the other pertinent issues. So, with respect to the MBTA and commuter rail services from and to Boston, please consider researching the other formidable sites. Thank you.

Sincerely,

Paul G. LaMontagne

Mr. & Mrs. Paul G. LaMontagne
7 Flint Pond Rd.
Worcester, MA 01604

Julia Buduo
51 Etre Drive
Worcester, MA

Secretary Trudy Coxe
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Attention: Janet Hutchins
MEPA Unit

Re: EOEA #9154

Dear Secretary Coxe,

I am writing in regards to my concern of the proposed MBTA Millbury station site. I am living in the surrounding neighborhood and have grave concerns of its location. Of all the commercial and industrial sites in Worcester I can not understand why it be allowed that a relatively rural, quiet environment has to be destroyed for a train station.

If you look at this attractive neighborhood setting and visualize a train station with all of its noise, oders and potential dangers due to its isolation one would think nobody has any regard for our environment at all. Worcester has enough eye, ear and crime sores without having another.

Your consideration of our neighborhood is greatly appreciated.

Sincerely,

Julia Buduo

Julia Buduo

JH

May 9, 1996

RECEIVED
MAY 1 - 1996
MEPA

Executive Office of Environmental Affairs
MEPA Unit
20th Floor
100 Cambridge Street
Boston, MA 02202

RE: **LOCATION OF PROPOSED MILLBURY MBTA TRAIN STATION**

No mention has been made of a possible access road from Route 122 in the Town of Millbury using the former "Millbury Railroad Junction" which was located on the now abandoned railroad right of way approimately 800 feet east of the Mass. Turnpike Interchange 11. This is on the left side of Route 122 abutting Wyman Gordon's Millbury Plant.

Traffic from the Turnpike Interchange would be reduced at the Wheelock Rd--Route 122 Intersection in Millbury and on Route 20 in Worcester.

When the new Route 146-Route 20 Turnpike Interchange, now under construction, is completed; there will be a reduction in traffic on Route 122 in Millbury and Worcester that now uses Interchange 11 in Millbury.

An access road, using the abandoned railroad right of way, would be much shorter than the proposed 3,300 foot roadway off Route 20 in Worcester. The proposed parking lot and station could be shifted further East and away from the residential development at Flint Pond Road in Worcester.

Thank you for your consideration.

Paul P. Foley

Paul Foley

10 Crestlan Drive
Worcester, MA 01604

c/c Senator Amorello
City Councillor Clancy

JH

RECEIVED
MAY 13 1996
MEPA

May 10, 1996

59 Westborough Street
Worcester, Mass 01604

Secretary Trudy Cope
Environmental Affairs

Re: EDEA #9154
Attn: Janet Hutchins, MEPA UNIT

Dear Secretary Cope:

I am writing to encourage you to select another site for the Worcester-Boston MBTA Commuter rail station rather than the proposed site off of Route 20 in Worcester.

I have been a daily commuter to Boston since 1979 and a resident of Westborough Street off Route 20 near the site for over 26 years. I am in favor of a Millbury/Grafton commuter rail station site that is contiguous to both of these towns and perhaps shared by both towns

Living within a few hundred yards of the Proposed Route 20 site for over 26 years, I can testify that the site would be extremely dangerous for any pedestrian and for motorists as well.

It is my understanding that Worcester has its commuter rail site. Why would the MBTA or potential commuters want another site. The proposed stations for Millbury and Grafton could be consolidated for economic and access reasons. I urge you to encourage Millbury and Grafton commuter rail proponents to consider a site to be used by both towns.

Sincerely,

Edmond J. Kelly

May 17, 1996

Ms. Trudy Coxe
Secretary, MEPA
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

REF: EOEA #9154

Dear Secretary Coxe:

I am writing to state my strong opposition to the proposed MBTA commuter rail station in Millbury with an access road off Route 20 in Worcester.

The MBTA's original proposal called for a station in Millbury with an access road in Millbury from Route 122 near the Mass Turnpike exit. The Town of Millbury rejected that proposal, due to the alleged traffic problems that the town felt would result, even though the Draft EIR did not indicate that this would be the case. The Millbury Citizens Advisory Committee was then formed. This committee of Millbury residents suggested relocating the station to the north side of the tracks with a Route 20 access road, in Worcester, as an alternative. Without obtaining any new traffic/accident data, which would be pertinent to the proper evaluation of the feasibility of the MCAC's proposal, the MBTA decided to go ahead with Millbury Citizens Advisory committee's suggestion and changed the site to the current proposed location. In their haste to meet the December 1996 deadline to get a Millbury station up and running in conjunction with another station just a few miles away in Grafton, the MBTA neglected to notify the City of Worcester and the residents of Flint Pond Village of their plans. The MBTA went ahead, only notifying the developer of Flint Pond Village whose property would have to be taken to complete the project. The developer of Flint Pond Village notified residents who in turn notified city and state officials.

The Traffic data in the FEIR is flawed. The traffic study in the Draft EIR released in January 1996 for the Route 20 access, was the same 1992 data from the previous DEIR of August 1993 for the then proposed Route 122 access. It was not until March 1996, after residents of Flint Pond village told the MBTA that the closest traffic signal to the proposed access road (Route 20 & Sunderland Road) was not even included in their study, that the MBTA hurriedly obtained some accident data, but not enough, just in time to include it in the Final EIR that is now before you. Data for several intersections, both signalized and unsignalized, in the immediate vacinity of the proposed site still have not been included in the study.

The current proposed site will undeniably have a negative impact on the City of Worcester, the developer and residents of Flint Pond Village, as well as other residents in the vicinity. Residents believe, as does the City of Worcester, that the property values will go down, not up as the MBTA contends. It appears that the MBTA has based their position on their "Rule of Thumb" that the property value will increase. That may ring true elsewhere, but not here.

This proposal is grievously flawed and we deserve the same options that Millbury had. The data that the MBTA used to support the feasibility of the proposed site is outdated. Although the Flint Pond Village development has been under construction for several years now, with about forty five of eighty-eight homes completed, the maps used by the MBTA did not indicate its existence until the developer provided maps of the subdivision to the MBTA in January 1996. This was well after they had decided on this location.

The close proximity of the 350-550 car parking lot (150 feet) to the property of residents on Flint Pond Road is unacceptable. The proposed location of the access road would only serve to augment the all too dangerous conditions on Route 20. Traffic, noise, automobile exhaust, public safety, and the inevitable decrease in property values in the area, which will also result in substantial and recurring loss of revenue for the City are all valid concerns and deserve to be acknowledged.

I don't see the sense in building a station only 2-3 miles away from the next. The FEIR states that the MBTA does not anticipate any lost ridership if they didn't build a Millbury station. They predicted that people would use either the Worcester or Grafton stations instead. If not having a Millbury station will not impact ridership, and should therefore not have a material impact on the overall goal of improving air quality, then why does the MBTA want to spend 3.2 million dollars for a station at this location?

Sincerely,

Judith A. Bonofiglio

Judith A. Bonofiglio
57 Etre Drive
Worcester, MA 01604

May 17, 1996

Ms. Trudy Coxe
Secretary, MEPA
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

REF: EOEA #9154

Dear Secretary Coxe:

I am opposed to the proposed access road to the Millbury rail station from Route 20 in Worcester. I live in the area of the proposed access road and feel that this area on Route 20 , while within walking distance from my home, is too dangerous to be accessed by pedestrians like myself due to the absence of sidewalks and street lights, the high volume of truck traffic, and the high speed of the traffic on Route 20.

Sincerely,

Carol M. Fenlon

Carol M. Fenlon
18 Ideal Road
Worcester, MA 01604